P-A STATE

FEBRUARY 1983 NUMBER 462 -- Part II

Astronomy
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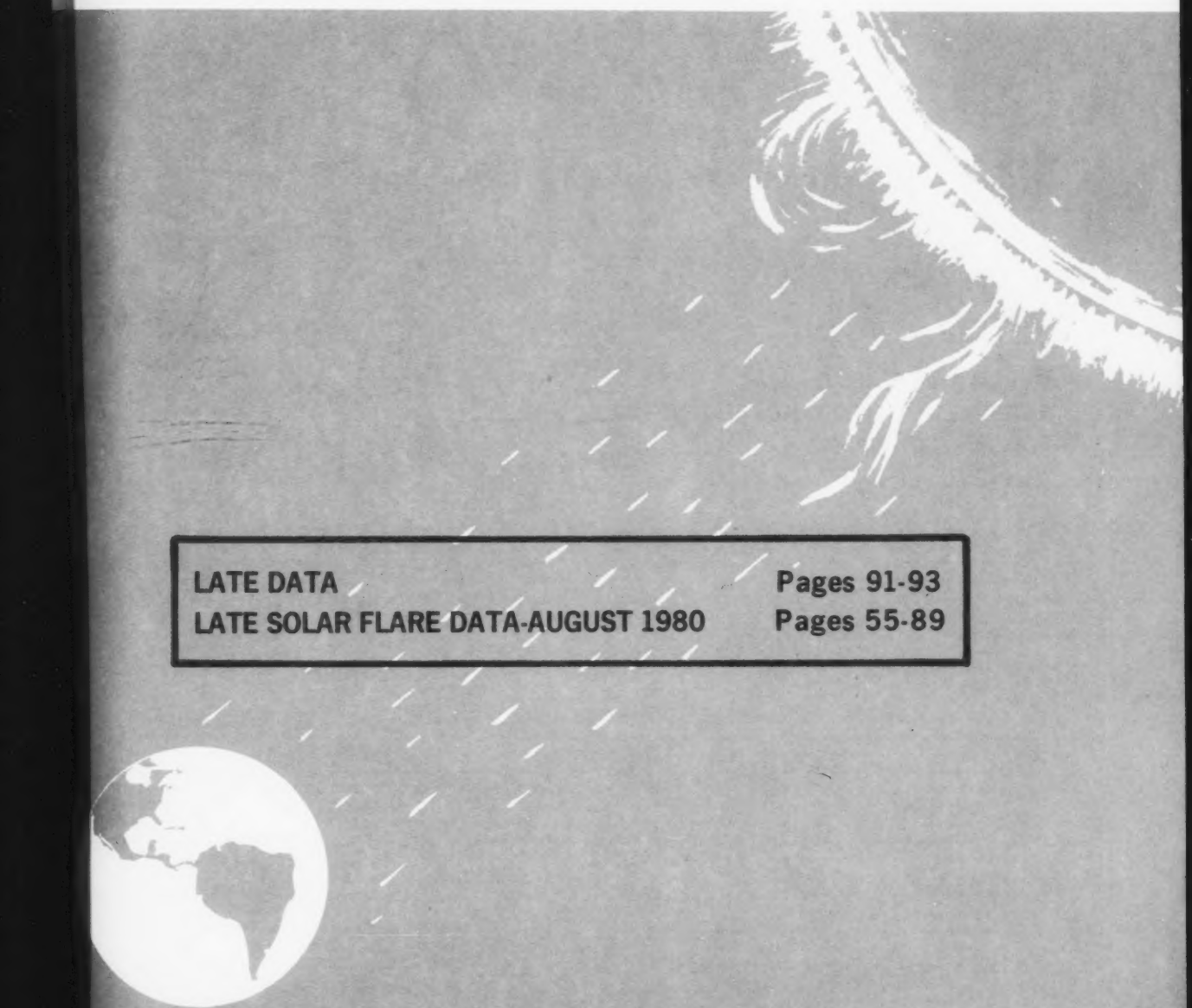
Solar-Geophysical Data comprehensive reports

Data for August 1982, August 1980 & Miscellanea

Explanation of Data Reports Issued as Number 462 (Supplement) February 1983



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Solar - Geophysical Data

Part II (Comprehensive Reports)

NO. 462 FEBRUARY 1983

DATA FOR
AUGUST 1982
AUGUST 1980

Michael A. Chinnery, Director
NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

No. 461

Issued in two parts

Helen E. Coffey, Editor

Joe H. Allen, Chief
Solar-Terrestrial Physics Division

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CODE	KIND OF OBSERVATION	1982 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1983 JAN
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A.8ac	2800 MHz - Daily Values of Adj. Solar Flux (ARO-Ottawa)	450A 11	451A 11	452A 11	453A 11	454A 9	455A 11	456A 9	457A 9	458A 9	459A 9	460A 11	461A 11	462A 11
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C.4k	Solar Radio Spectral Obs. (Learmonth)	451A140	452A124	453A118	454A121	455A143	456A124	457A130	458A125	459A131	460A106	461A109	462A 98	
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F.1e	Cosmic Ray Neutron Counts (Alert)	451A151	452A151	453A135	455A177	455A152	456A148	457A153	459A160	459A149	460A119	462A134	462A116	
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"451A 58" listed under 1982 Jan means that the sunspot drawings for Jan 1982 were contained in Solar-Geophysical Data Number 451 - Part I, beginning on page 58.

A = Part I, B = Part II.

----- = no data available.
blank = data not yet received.

*Solar radio noise bursts observed at Athens, Learmonth, Manila, Palehua and Sagamore Hill during Aug 1979 through Oct 1980 appear in Solar-Geophysical Data, Number 461, Part II, pages 103-2135.

SGD 462 Part II (Comprehensive)

AUGUST 1982 DATA

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	29	UPIC	44	NS	0400.0E		639.8D				
	33	UPIC	44	NS	0400.0E		639.5D				
	3100	CRIM	44	NS	2100.0E		360.0D		1.0		
	245	LEAR	8	S	0140.8	0140.8	.2	15.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0147.3	0148.1	3.7	13.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0216.0	0216.1	.1	22.0			QL=6 ST=2 TYP=3
	245	LEAR	4	S/F	0223.1	0223.3	2.9	17.0			QL=6 ST=2 TYP=3
	500	HIRA	7	C	0246.3	0246.4	6.0	11.0	3.0		0
	410	PALE	8	S	0246.3	0246.6	1.2	49.0			QL=6 ST=2 TYP=3
	245	PALE	49	GB	0246.3	0246.8	1.8	1000.0			QL=6 ST=2 TYP=6
	2000	TYKW	45	C	0246.5	0246.8	4.5	19.0	4.0D		
	3750	TYKW	5	S	0246.5	0248.0U	7.0	2.0D	1.0D		
	200	HIRA	42	SER	0246.6	0247.0	2.1	220.0			0
	410	LEAR	47	GB	0246.6	0247.0	3.7	75.0			QL=6 ST=2 TYP=5
	245	LEAR	49	GB	0246.6	0247.0	2.5	950.0			QL=6 ST=2 TYP=6
	100	HIRA	42	SER	0246.6	0247.1	2.6	4600.0			WL
	1000	TYKW	45	C	0246.7E	0247.0	6.3D	38.0	7.0D		
	610	LEAR	4	S/F	0246.8	0247.0	6.2	10.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	0246.8	0247.1	1.8	17.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0246.8	0247.1	5.2	4.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0246.8	0247.1	6.2	15.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0246.8	0247.1	6.2	8.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0251.0		9.0	2.0	.7		
	1000	TYKW	29	PBI	0253.0		12.0	3.0	1.0		
	3750	TYKW	20	GRF	0450.0	0455.0	30.0	2.0	1.0		
	1000	TYKW	5	S	0451.0	0451.7	2.0	2.0	1.0		
	200	HIRA	46	C	0453.6	0454.6	2.2	110.0	14.0		0
	1000	TYKW	5	S	0454.0	0454.8	2.0	4.0	1.5		
	100	GORK	4	S/F	0454.0	0455.2	2.0	380.0			
	100	HIRA	46	C	0454.2	0454.4	1.4	1700.0	465.0		WL
	245	LEAR	8	S	0454.8	0455.5	.8	18.0			QL=6 ST=2 TYP=3
	100	GORK	45	C	0617.5	0617.8	1.0	140.0D			
	100	GORK			0617.5	0618.1		140.0D			
	100	GORK	41	F	0636.8	0637.2U	4.5	140.0D			
	100	GORK			0636.8	0640.7U		140.0D			
	3750	TYKW	21	GRF	0640.0	0734.0	120.0U	7.0	3.0U		RAIN
	2000	TYKW	21	GRF	0650.0	0711.0	110.0	3.0	1.5		
	5200	BERN	22	GRF	0655.0U	0722.5	100.0U	22.0			
	3200	BERN	22	GRF	0655.0U	0722.6	100.0U	37.0			
	2950	GORK	21	GRF	0703.0	0724.2	114.0	7.0			
	500	HIRA	8	S	0708.1	0708.4	.4	30.0			0
	536	ONDR	41	F	0708.7	0708.9	1.4	35.0			
	500	HIRA	8	S	0709.0	0709.1	.3	15.0			0
	610	LEAR	8	S	0709.1	0709.3	1.2	37.0			QL=6 ST=2 TYP=3
	200	GORK	4	S/F	0717.4	0718.9	6.5	6.0			
	2840	PEKG	45	C	0717.8	0722.8	8.0	18.0	8.2		
	950	GORK	5	S	0717.9	0718.9	6.2	1.3			
	2650	DWIN	1	S	0718.0	0718.0	1.0	8.0	4.0		
	6100	KISV	1	S	0718.0	0718.4	1.0	3.0			
	2950	GORK	1	S	0718.0	0718.6	1.4	7.0			
	650	GORK	20	GRF	0718.0	0718.9	6.0	1.0			
	1000	TYKW	5	S	0718.0	0719.0	3.0	2.0	.7		
	2000	TYKW	45	C	0718.0	0722.6	10.0	10.0	2.5		
	3750	TYKW	45	C	0718.0	0722.6	9.0	15.0	3.0		
	3000	POTS	42	SER	0718.0	0722.9	6.5	19.0			
	1470	POTS	42	SER	0718.0	0723.0	6.5	4.0			
	2695	LEAR	4	S/F	0718.3	0722.6	5.3	17.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0718.6	0722.5	4.4	11.0			QL=6 ST=2 TYP=3
	2950	GORK	3	S	0721.9	0722.7	2.0	14.0			
	6100	KISV	2	S/F	0721.9	0722.8	2.0	4.0			
	2650	DWIN	1	S	0722.0	0722.0	1.0	13.0	6.0		
	2695	ATHN	8	S	0722.0	0722.6	1.8	17.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0722.0	0722.6	2.3	10.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0850.1	0850.6	.7	119.0			QL=6 ST=2 TYP=5
	100	GORK	4	S/F	0947.2	0948.0U	1.7	160.0D			
	1470	POTS	1	S	0947.5	0948.2	1.5	2.0			
	808	ONDR	8	S	1046.4	1046.4	.2	11.0			
	245	SGMR	8	S	1046.8	1047.1	.3	42.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1047.0	1047.4	.7	50.0	3.0		
	410	SGMR	8	S	1047.1	1047.1	.2	30.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	1047.7	1047.7	.1	4.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	536	ONDR	41	F	1233.4	1233.4	1.7	6.0			
	245	SGMR	8	S	1435.1	1435.6	.9	40.0			QL=6 ST=2 TYP=3
	113	POTS	4	S/F	1435.2	1436.3	1.9	110.0	20.0		
	9400	HUAN	20	GRF	1751.6	1802.6	17.5	3.9	2.0		0
	2800	OTTA	240	R	1830.0	1847.0	17.0	1.6	.8		
	2800	OTTA	240	R	1925.0	1945.0	20.0	3.6	2.0		
	2800	OTTA	1	S	1949.0	1950.5	3.2	3.0	2.0		
02	245	LEAR	43	NS	0131.1	0644.3	494.9D	139.0			QL=6 ST=2 TYP=1
	200	GORK	44	NS	0237.0E		538.0D		5.0		
	100	GORK	43	NS	0412.0		348.0D		5.0		
	200	HIRA	43	NS	0430.0	0732.0	320.0D	9.0	3.0		WL
	260	ONDR	44	NS	0558.0E	0718.0	502.0D	4.0U			
	208	VORO	44	NS	2100.0E		360.0D				
	245	LEAR	43	NS	2339.8	0134.3	606.2D	43.0			QL=6 ST=2 TYP=1
	245	LEAR	8	S	0047.3	0047.5	.3	26.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0214.0	0215.7	10.0	6.0	1.5		
	204	IZMI	41	F	0640.0	0644.4	4.5	300.0			
	234	POTS	41	F	0642.8	0644.5	1.7	140.0	2.0		
	650	GORK	4	S/F	0729.5	0730.5	4.0	8.0			
	29	UPIC	42	SER	0758.1	1009.5	242.3				
	33	UPIC	42	SER	0758.2	1009.2	241.8				
	9400	TYKW	21	GRF	0800.0	0820.0	80.0	8.0	3.0		
	3750	TYKW	28	PRE	0804.5	0805.7	4.5	3.0	2.0		
	4995	ATHN	4	S/F	0804.5	0811.1	16.0	38.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0806.3	0811.1	14.2	15.0			QL=6 ST=2 TYP=3
	9100	GORK	21	GRF	0807.8		25.0				
	3100	CRIM	1	S	0808.0	0811.2	26.0	12.0	4.0		
	8400	BERN	4	S/F	0808.8	0811.3	30.0	27.0			
	3200	BERN	4	S/F	0808.8	0811.4	30.0	34.0			
	5200	BERN	4	S/F	0808.8	0811.4	30.0	49.0			
	3750	TYKW	5	S	0809.0	0811.3	5.0	29.0	10.0		
	6100	KISV	4	S/F	0809.0	0811.4	5.0	17.0			
	9395	PEKG	20	GRF	0809.0	0811.5	32.0	11.0	5.1		
	2840	PEKG	3	S	0809.0	0811.5	3.0	12.0	4.0		
	2695	ATHN	4	S/F	0809.1	0811.1	11.4	10.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0809.5	0811.3	6.3	31.0			QL=6 ST=3 TYP=3
	8800	LEAR	4	S/F	0810.0	0811.3	2.8	13.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0810.0	0811.3	2.8	10.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0810.0	0811.3	4.0	3.0	1.0		
	2950	GORK	21	GRF	0810.0	0812.5	25.5	2.7			
	3000	POTS	3	S	0810.5	0812.3	4.5	11.0			
	9400	TYKW	5	S	0810.7	0811.3	3.0	9.0	3.0		
	9100	GORK	1	S	0811.0	0811.2	.7	6.5			
	9500	POTS	1	S	0811.0	0811.3	2.0	5.0			
	2950	GORK	1	S	0811.1	0811.5	1.1	6.7			
	2840	PEKG	29	PBI	0812.0		53.0	4.7	0.8		
	3750	TYKW	29	PBI	0814.0		35.0	7.0	3.0		
	950	GORK	4	S/F	1003.0	1003.8	1.2	21.0			
	650	GORK	4	S/F	1003.1	1003.7	1.1	73.0			
	2950	GORK	22	GRF	1003.5	1201.5	118.0D	11.0			
	100	GORK	45	C	1009.3	1009.5	.8	220.0D			
	100	GORK			1009.3	1009.8		220.0D			
	245	SGMR	47	GB	1044.3	1044.5	1.8	59.0			QL=6 ST=2 TYP=5
	234	POTS	4	S/F	1044.3	1044.5	.7	180.0	5.0		
	536	ONDR	40	F	1044.4	1044.5	2.9	4.0			
	536	ONDR	8	S	1106.9	1106.9	.2	5.0			
	610	SGMR	8	S	1234.8	1235.1	2.0	18.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1235.0	1235.1	.3	97.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1235.0	1235.1	.3	48.0			QL=6 ST=2 TYP=3
	1415	SGMR	47	GB	1303.8	1304.0	.8	180.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1304.1	1304.3	.5	39.0			QL=6 ST=2 TYP=3
	234	POTS	4	S/F	1341.3	1341.4	.3	220.0	15.0		
	2800	OTTA	1	S	1508.0	1509.0	10.0	1.8	1.2		
	2800	OTTA	21	GRF	1605.0	1640.0	155.0	15.6	6.6		
	2800	OTTA	240	AR	1605.0	1845.0	160.0	4.0			
	2800	OTTA	8	S	1621.1	1621.4	.7	20.0	10.0		
	9400	HUAN	20	GRF	1621.2	1642.4U	67.9	5.8	5.5		0
	2800	OTTA	20	GRF	1713.0	1716.7	18.0	9.8	3.2		
	2800	OTTA	22	GRF	1805.0	1824.0	30.0	4.6	2.0		
	245	SGMR	8	S	1839.1	1839.3	.2	28.0			QL=6 ST=2 TYP=3

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02	2800	OTTA	20	GRF	2040.0	2120.0	75.0	2.4	1.2		
	200	HIRA	45	C	2206.8	2207.2	.8	2300.0	440.0		WL
	2800	OTTA	2	S/F	2207.0	2207.2	3.0	2.4	1.2		
	100	HIRA	46	C	2207.0	2207.3	1.6	1200.0	220.0		WL
03	260	ONDR	44	NS	0549.0E		492.0D	6.0U			
	33	UPIC	43	NS	0733.8		457.8				
	29	UPIC	44	NS	0836.7E		395.1D				
	1000	TYKW	45	C	0028.0	0029.5	5.0	4.0	.7		
	2000	TYKW	5	S	0028.9	0029.1	2.0	2.5	1.0		
	2695	PENT	1	S	0029.0	0029.1	3.0	2.8	1.2		
	245	LEAR	47	GB	0029.1	0029.1	1.2	150.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0030.0	0030.1	.1	57.0			QL=6 ST=2 TYP=5
	245	PALE	49	GB	0134.8	0135.0	1.3	770.0			QL=6 ST=2 TYP=6
	245	LEAR	49	GB	0135.0	0135.1	1.3	670.0			QL=6 ST=2 TYP=6
	410	LEAR	8	S	0135.0	0135.1	1.3	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0230.0U	0238.0U	20.0U	2.0U	1.0U		RAIN
	410	LEAR	8	S	0634.1	0634.1	.2	27.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0645.0	0646.3	2.5	8.5			
	650	GORK	4	S/F	1040.5	1040.9	.5	27.0			
	950	GORK	4	S/F	1040.6	1040.8	.8	24.0			
	950	GORK	4	S/F	1119.0	1119.4	.8	19.0			
	650	GORK	4	S/F	1144.2	1144.7	.7	83.0			
	950	GORK	4	S/F	1144.4	1144.9	.6	29.0			
	2800	OTTA	27AF	RF	1300.0		355.0	2.8	2.5		
	2800	OTTA	24	R	1300.0	1315.0	15.0	2.8	1.4		
	2650	DWIN	1	S	1301.0	1301.0	5.0	25.0	10.0		
	3000	POTS	3	S	1301.0	1301.5	3.5	25.0			
	9500	POTS	1	S	1301.0	1301.5	2.3	9.0			
	2800	OTTA	3	S	1301.0	1301.5	11.0	24.6	6.2		
	1470	POTS	3	S	1301.0	1301.8	14.0	27.0			
	3200	BERN	3	S	1301.1	1301.4	6.0	108.0			
	5200	BERN	3	S	1301.1	1301.4	6.0	8.0			
	11800	BERN	3	S	1301.1	1301.4	6.0	26.0			
	8400	BERN	3	S	1301.1	1301.4	6.0	17.0			
	2695	SGMR	8	S	1301.3	1301.5	.5	40.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1301.3	1301.5	.2	17.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1301.3	1301.5	1.7	40.0			QL=6 ST=2 TYP=3
	2800	OTTA	24P	R	1315.0		285.0	2.8			
	2800	OTTA	20	GRF	1540.0	1555.0	100.0	3.0	1.5		
	2800	OTTA	26	FAL	1800.0	1855.0	55.0	-2.8	-1.4		
	2800	OTTA	22	GRF	2030.0	2115.0	70.0	3.0	1.5		
	3750	TYKW	5	S	2256.0	2257.0	15.0	3.0	1.0		
04	200	GORK	44	NS	0259.0E		536.0D		5.0		
	260	ONDR	44	NS	0558.0E		434.0D	4.0U			
	200	HIRA	44	NS	1945.0E	2227.0	830.0D	10.0	5.0		WL
	100	HIRA	44	NS	1945.0E	2240.0	560.0D	30.0	10.0		ML
	245	LEAR	43	NS	2312.0	0747.8	635.0D	4000.0			QL=6 ST=2 TYP=1
	610	LEAR	8	S	0000.6	0000.8	.4	30.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0013.0	0015.0	40.0	3.0	1.5		
	3750	TYKW	5	S	0017.0	0018.2	3.0	3.0	1.0		
	3750	TYKW	21	GRF	0155.0	0200.0	50.0	5.0	1.5		
	3750	TYKW	5	S	0222.0	0223.5	11.0	6.0	1.5		
	9400	TYKW	5	S	0222.0	0224.0	12.0	4.0	1.5		
	245	LEAR	8	S	0230.1	0230.3	.5	20.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0315.0	0336.0	45.0	2.0	1.0		
	8800	ATHN	47	GB	0334.8	0335.3	3.7	169.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	0335.1	0335.6	2.5	19.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0406.0	0419.0	170.0	4.0	2.0		
	2950	GORK	21	GRF	0406.0	0436.3	198.0	6.8			
	9100	GORK	21	GRF	0406.5	0442.0	225.0	12.9			
	9400	TYKW	28	PRE	0407.0	0434.0	28.0	8.0	2.5		
	2000	TYKW	20	GRF	0408.0	0416.0	50.0	3.0	1.0		
	3750	TYKW	45	C	0428.0	0435.9	9.0	4.0	2.0		
	9400	TYKW	45	C	0429.0	0430.0	1.5	8.0	3.0		
	9100	GORK	1	S	0429.3	0430.0	1.2	8.3			
	9400	TYKW	5	S	0430.5	0431.9	2.0	7.0	2.5		
	9100	GORK	1	S	0431.2	0431.7	.9	5.2			
	8800	ATHN	47	GB	0434.8	0435.3	3.7	169.0			QL=6 ST=3 TYP=5
	9400	TYKW	5	S	0435.0	0435.8	5.0	194.0	40.0		

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04	4995	ATHN	4	S/F	0435.1	0435.6	2.5	19.0			QL=6 ST=3 TYP=3
	9100	GORK	3	S	0435.1	0435.8	4.3	194.0			
	4995	PALE	8	S	0435.3	0435.8	1.7	38.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	0435.3	0435.8	2.0	200.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0435.3	0435.8	3.8	200.0			QL=3 ST=2 TYP=5
	17000	NOBE	1	S	0435.4	0435.9	4.0	84.0			0
	2950	GORK	3	S	0435.6	0435.8	.4	20.0			
	4995	LEAR	8	S	0435.6	0435.8	1.2	17.0			QL=3 ST=2 TYP=3
	15400	LEAR	47	GB	0435.6	0435.8	3.0	100.0			QL=3 ST=2 TYP=5
	1415	PALE	8	S	0435.6	0435.8	1.2	13.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0435.6	0435.8	.4	15.0			QL=3 ST=2 TYP=3
	8800	MANI	3	S	0436.0	0436.5	1.3	62.8	20.9		
	4995	MANI	3	S	0436.0	0436.7	1.3	21.1	7.0		
	2695	MANI	3	S	0436.0	0436.7	1.3	15.5	5.2		
	3750	TYKW	29	PBI	0437.0		15.0	2.0	1.0		
	9400	TYKW	29	PBI	0440.0		50.0	8.0	3.0		
	3750	TYKW	5	S	0457.0	0458.0	4.0	1.5	.5		
	3750	TYKW	21	GRF	0604.0	0610.0	40.0	1.5	.7		
	6100	KISV	20	GRF	0614.0	0631.5	37.0	7.0			
	9400	TYKW	20	GRF	0620.0	0632.0	30.0	5.0	2.0		
	3750	TYKW	5	S	0627.0	0631.0	11.0	2.0	1.0		
	2000	TYKW	20	GRF	0630.0	0655.0	50.0	1.5	.7		
	100	GORK	41	F	0720.7	0721.3	2.2	20.0			
	100	GORK			0720.7	0722.7		30.0			
	200	GORK	4	S/F	0720.8	0724.1	3.9	35.0			
	2000	TYKW	5	S	0722.0	0722.7	2.0U	7.0	1.5		
	2000	TYKW	21	GRF	0722.0	0800.0	120.0U	2.0	1.0		
	6100	KISV	22	GRF	0722.0	0738.0	30.0D	6.0			
	500	HIRA	8	S	0722.3	0722.4	.4	1200.0			WL
	610	LEAR	47	GB	0722.3	0722.6	1.3	139.0			QL=6 ST=2 TYP=5
	950	GORK	2	S/F	0722.4	0722.7	2.6	6.6			
	930	BORD	41	F	0722.4	0722.7	1.4	20.0	3.0		
	1000	TYKW	45	C	0722.4	0722.7	2.0	8.0	2.0		
	650	GORK	4	S/F	0722.4	0722.7	2.7	71.0			
	2950	GORK	1	S	0722.5	0722.8	.9	2.7			
	1470	POTS	3	S	0722.5	0722.9	2.0	6.0			
	3750	TYKW	5	S	0722.5	0722.9	1.5	3.0	1.0		
	2950	GORK	22	GRF	0727.0	0745.0	79.0	4.0			
	3750	TYKW	5	S	0732.0	0738.0	25.0	5.0	1.5		
	2950	GORK	21	GRF	0853.0	1045.0	190.0D	9.9			
	9100	GORK	20	GRF	0921.0	1018.0	159.0	12.8			
	6100	KISV	1	S	1007.5	1008.2	1.5	5.0			
	3000	POTS	1	S	1007.5	1008.3	2.0	5.0			
	2950	GORK	2	S/F	1020.2	1021.1	3.1	5.7			
	2800	OTTA	21	GRF	1225.0	1445.0	155.0	4.0	2.8		
	3000	POTS	42	SER	1353.0	1354.7	9.0	9.0			
	8400	BERN	3	S	1353.6	1354.5	7.0	121.0			
	3200	BERN	1	S	1353.6	1354.6	7.0	16.0			
	19600	BERN	3	S	1353.6	1354.6	7.0	73.0			
	11800	BERN	3	S	1353.6	1354.6	7.0	144.0			
	5200	BERN	3	S	1353.6	1354.6	7.0	76.0			
	9500	POTS	42	SER	1353.8	1359.9	7.7	86.0			
	9400	HUAN	3	S	1354.0	1354.5	1.8	121.1	44.9		0
	2800	OTTA	2	S/F	1354.0	1354.8	3.5	4.8	2.4		
	15400	SGMR	47	GB	1354.3	1354.6	1.2	160.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1354.3	1354.6	1.5	64.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1354.3	1354.6	1.0	110.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1354.8	1355.6	2.5	51.0			QL=6 ST=2 TYP=5
	1470	POTS	42	SER	1355.0	1401.2	7.0	22.0			
	8800	ATHN	47	GB	1355.1	1355.6	1.5	119.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	1355.8	1355.8	37.8	10.4	3.2		0
	930	BORD	46	C	1400.6	1400.9	1.0	44.0	5.0		
	1415	SGMR	8	S	1400.8	1400.8	.5	48.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1400.8	1401.0	1.0	3.6	1.8		
	2695	SGMR	8	S	1400.8	1401.1	.3	26.0			QL=6 ST=2 TYP=3
	33	UPIC	4	S/F	1408.1U	1408.2	.8U				
	113	POTS	4	S/F	1408.2	1408.7	7.2	400.0	20.0		
	2800	OTTA	240	R	1515.0	1645.0	90.0	4.4	2.0		
	2800	OTTA	240	R	1705.0	1715.0	10.0	2.8	1.4		
	2800	OTTA	21	GRF	1725.0	1930.0	350.0	12.8	6.6		
	610	PALE	4	S/F	1821.8	1822.0	3.2	20.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	930	BORD	3	S	1823.3	1823.8	1.0	42.0	7.0		
	610	PALE	4	S/F	1826.0	1826.3	2.1	48.0			QL=6 ST=2 TYP=3
	610	PALE	8	S	1830.3	1830.8	1.5	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	2005.0	2018.0	40.0	7.4	4.6		
	100	HIRA	42	SER	2027.6	2030.7	5.0	4500.0			WL
	200	HIRA	45	C	2030.7	2031.2	.7	1480.0	294.0		0
	3750	TYKW	20	GRF	2059.0E	2059.0U	100.0D	4.0D	2.0D		
	9400	TYKW	20	GRF	2100.0E	2100.0U	90.0D	18.0D	9.0D		
	2000	TYKW	20	GRF	2100.0E	2100.0U	100.0D	45.0D	2.0D		
	9400	TYKW	5	S	2243.0	2250.0	25.0	2.0	1.0		
	3750	TYKW	32	ABS	2307.0	2322.0	100.0	-4.0	-2.0		
	2000	TYKW	32	ABS	2308.0	2318.0	30.0	-2.0	-1.0		
	9400	TYKW	31	ABS	2308.0	2330.0	125.0	-3.0	-1.5		
	3750	TYKW	5	S	2340.0	2341.4	4.0	43.0	12.0		
	2695	PENT	21	GRF	2340.0	2358.0	130.0	3.0	2.2		
	245	LEAR	47	GB	2340.3	2341.0	1.0	80.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2340.5	2341.0	1.3	88.0			QL=6 ST=2 TYP=5
	410	LEAR	4	S/F	2340.5	2341.1	2.1	45.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	2340.5	2341.4	3.5	9.0	4.0		
	9400	TYKW	5	S	2340.5	2341.4	3.5	40.0	13.0		
	2695	PENT	3	S	2340.5	2341.5	6.0	21.2	5.2		
	4995	LEAR	47	GB	2340.6	2341.3	3.7	60.0			QL=5 ST=2 TYP=5
	8800	LEAR	4	S/F	2340.6	2341.3	2.5	48.0			QL=5 ST=2 TYP=3
	2695	LEAR	8	S	2340.8	2341.3	1.5	20.0			QL=5 ST=2 TYP=3
	1000	TYKW	5	S	2341.0	2341.7	4.0	7.0	4.0		
	4995	PALE	47	GB	2341.1	2341.3	1.7	58.0			QL=6 ST=2 TYP=5
	8800	PALE	4	S/F	2341.1	2341.3	2.4	47.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	2341.1	2341.3	1.4	17.0			QL=6 ST=2 TYP=3
	4995	MANI	3	S	2341.2	2341.8	1.3	25.5	8.5		
	2695	MANI	3	S	2341.2	2341.8	1.3	19.6	6.5		
	1415	MANI	1	S	2341.2	2341.8	1.3	5.3	1.8		
	15400	PALE	8	S	2341.3	2342.0	1.3	27.0			QL=6 ST=2 TYP=3
	3750	TYKW	29	PBI	2344.0		50.0	4.0	2.0		
	9400	TYKW	29	PBI	2344.0		25.0	5.0	2.5		
	2000	TYKW	29	PBI	2344.0		50.0	2.0	1.0		
	1000	TYKW	29	PBI	2345.0		20.0	2.0	.7		
05	200	GORK	44	NS	0301.0E		539.0D		5.0		
	260	ONDR	44	NS	0550.0E	0747.0U	501.0D				
	1000	TYKW	32	ABS	0040.0	0210.0	300.0	-3.0	-1.5		
	3750	TYKW	5	S	0111.0	0117.0	15.0	1.5	.5		
	3750	TYKW	5	S	0129.0	0130.5	9.0	1.5	.5		
	2000	TYKW	32	ABS	0135.0	0150.0	120.0	-3.0	-1.5		
	9400	TYKW	32	ABS	0135.0	0230.0	185.0	-8.0	-4.0		
	3750	TYKW	31	ABS	0138.0	0145.0	70.0	-3.0	-1.5		
	9400	TYKW	5	S	0159.5	0200.7	10.0	5.0	1.5		INTERFERENCE
	2840	PEKG	45	C	0340.0	0349.3	24.0	43.0	19.2		
	3750	TYKW	45	C	0340.5	0349.2	15.5	37.0	12.0		
	2000	TYKW	45	C	0341.0	0349.2	19.0	38.0	10.0		
	9400	TYKW	45	C	0342.0	0346.9	11.0	58.0	20.0		
	9395	PEKG			0342.0	0347.5					
	9395	PEKG	45	C	0342.0	0349.0	17.0	50.0	23.0		
	500	HIRA	45	C	0342.1	0342.9	1.4	900.0	200.0		WL
	2950	GORK	1	S	0342.8	0344.6	2.9	12.0			
	1000	TYKW	5	S	0343.0	0343.7	2.0	4.0	1.5		
	1415	MANI	4	S/F	0343.0	0347.7	11.0	104.7	34.9		
	2695	MANI	4	S/F	0343.0	0349.2	11.0	52.9	17.6		
	4995	MANI	4	S/F	0343.0	0349.2	10.5	68.7	22.9		
	9100	GORK	21	GRF	0343.0	0352.0	18.2	15.2			
	9100	GORK	1	S	0344.1	0344.7	1.1	10.1			
	950	GORK	21	GRF	0344.2		237.8				
	650	GORK	41	F	0344.2	0344.5	6.7	52.0			
	650	GORK			0344.2	0347.4		85.0			
	1000	TYKW	30	PBI	0345.0		1.0	.7	.7		
	35000	NAGO	20	GRF	0345.0	0347.0	12.0	6.0			
	1000	TYKW	45	C	0346.0	0348.9	11.0	55.0	13.0		
	500	HIRA	45	C	0346.0	0346.7	2.3	1200.0	200.0		WL
	17000	NOBE	1	S	0346.2	0347.0	5.0	28.0			0
	2950	GORK	23	GRF	0347.0	0654.0	280.0	6.7			
	9100	GORK	45	C	0347.1	0348.0	4.5	17.0			
	9100	GORK			0347.1	0349.8		19.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	950	GORK	4	S/F	0347.3	0350.0	6.6	27.5			
	2950	GORK	4	S/F	0347.7	0350.0	6.6	35.0			
	9400	TYKW	29	PBI	0353.0		30.0	4.0	2.0		
	3750	TYKW	29	PBI	0356.0		70.0	5.0	1.5		
	1000	TYKW	29	PBI	0357.0		40.0	5.0	1.5		
	2000	TYKW	29	PBI	0400.0		60.0	4.0	1.5		
	500	HIRA	8	S	0554.9	0555.2	.6	40.0			WR
	3750	TYKW	20	GRF	0650.0	0652.2	35.0	3.0	1.0		
	2000	TYKW	5	S	0651.0	0653.0	5.0	1.0	.5		
	3750	TYKW	5	S	0732.0	0734.4	12.0	2.0	1.0		
	234	POTS	4	S/F	0735.4	0735.5	1.5	165.0	30.0		
	204	IZMI	41	F	0746.2	0747.8	2.0	1790.0			
	100	HIRA	42	SER	0746.3	0746.3	2.8	6500.0			ML
	100	HIRA			0746.3	0746.7		4900.0			WL
	200	HIRA	42	SER	0746.3	0747.7	2.0	1760.0			WL
	234	POTS	42	SER	0746.4	0747.8	12.0	4400.0	40.0		III
	113	POTS	42	SER	0746.5	0747.8	12.0	1400.0	25.0		III
	2950	GORK	23	GRF	0833.5	1144.0	211.0D	11.3			
	200	GORK	46	C	0938.8	0940.0	6.2	40.0D			
	650	GORK	46	C	0938.8	0940.1	7.5	67.0			
	650	GORK			0938.8	0942.3		30.0			
	200	GORK			0938.8	0944.0		40.0			
	930	BORD	46	C	0939.0	0940.1	6.0	218.0	9.0		
	9500	POTS	22	GRF	0939.0	0943.5	14.0	7.0			
	950	GORK	4	S/F	0939.1	0940.1	5.7	150.0			
	3000	POTS	3	S	0939.5	0940.0	2.0	9.0			
	3200	BERN	1	S	0939.5	0940.0	3.0	13.0			
	5200	BERN	1	S	0939.5	0940.1	3.0	13.0			
	1470	POTS	42	SER	0939.5	0940.4	7.5	69.0			
	6100	KISV	1	S	0939.6	0939.9	.7	6.0			
	536	ONDR	41	F	0939.6	0940.0	8.5	42.0	20.0		
	808	ONDR	41	F	0939.7	0940.1	7.3	110.0U			
	204	IZMI	5	S	0939.8	0940.0	.8	470.0	300.0		
	2950	GORK	1	S	0939.8	0940.1	1.1	9.6			
	100	GORK			0939.8	0940.3		70.0			
	100	GORK	45	C	0939.8	0940.4	1.0	100.0D			
	2650	DWIN	2	S/F	0940.0	0940.0	1.0	20.0	10.0		
	6100	KISV	23	GRF	0940.5	0943.5	10.0	4.0			
	950	GORK	20	GRF	1053.0	1130.2	70.0	9.0			
	6100	KISV	45	C	1138.7	1139.2	6.0	36.0			
	6100	KISV			1138.7	1144.1		10.0			
	11800	BERN	46	C	1138.8	1139.1	18.0	49.0			
	19600	BERN	46	C	1138.8	1139.1	18.0	33.0			
	8400	BERN	46	C	1138.8	1139.1	18.0	78.0			
	5200	BERN	46	C	1138.8	1139.2	18.0	50.0			
	3200	BERN	46	C	1138.8	1139.2	18.0	21.0			
	9100	GORK	21	GRF	1138.8	1140.4	247.0D	12.6			
	2950	GORK	1	S	1138.9	1139.2	1.3	9.8			
	2800	OTTA	8	S	1139.0	1139.1	.5	7.0			
	3000	POTS	3	S	1139.0	1139.2	1.0	11.0			
	9500	POTS	42	SER	1139.0	1143.7	11.0	14.0			
	234	POTS	4	S/F	1139.6	1140.0	.9	360.0	60.0		III
	9100	GORK	1	S	1143.7	1144.0	.5	30.0			
	2800	OTTA	8	S	1144.0	1144.1	.5	5.2			
	6100	KISV	21	GRF	1147.0	1154.5	10.0	7.0			
	6100	KISV	8	S	1148.4	1148.6	.6	14.0			
	9100	GORK	4	S/F	1148.4	1148.8	.5	73.0			
	6100	KISV	2	S/F	1257.0	1258.0	3.0	5.0			
	234	POTS	4	S/F	1257.3	1257.5	.5	100.0	13.0		
	113	POTS	8	S	1309.3	1309.3	.1	270.0	90.0		III
	9400	HUAN	20	GRF	1339.2	1359.7	41.5	6.9	4.6		0
	1470	POTS	42	SER	1433.5	1434.1	6.5	9.0			
	2800	OTTA	1	S	1433.8	1433.9	1.5	7.0	2.4		
	2800	OTTA	1	S	1437.5	1438.0	2.5	2.0	1.0		
	33	UPIC	4	S/F	1504.2	1504.3	.8				
	29	UPIC	4	S/F	1504.2	1504.5	.7				
	2800	OTTA	240	R	1505.0	1540.0	35.0	2.8	1.4		
	9400	HUAN	2	S/F	1559.6	1600.4	3.8	17.2	5.8		0
	9400	HUAN	1	S	1620.1	1622.4	4.3	12.0	7.8		0
	930	BORD	41	F	1622.0	1623.7	2.0	46.0	2.0		
	2800	OTTA	1	S	1622.5	1623.0	2.5	3.2	2.2		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	2800	OTTA	240	R	1705.0	1720.0	15.0	2.8	1.4		
	2800	OTTA	2	S/F	1753.0	1754.0	7.0	4.6	1.6		
	9400	HUAN	20	GRF	1849.6	1907.4	39.9	8.6	5.8		0
	3750	TYKW	45	C	2129.0	2132.7	5.0	14.0	5.0		
	2000	TYKW	45	C	2129.0	2132.8	7.0	11.0	3.0		
	2800	OTTA	45	C	2129.0	2132.7	9.0	11.2	3.5		
	9400	TYKW	45	C	2129.5	2132.7	4.5	26.0	10.0		
	1000	TYKW	45	C	2130.0	2132.7	6.0	23.0	3.0		
	9400	HUAN	2	S/F	2130.6	2132.5	4.2	18.9	8.2		R
	500	HIRA	45	C	2131.3	2132.4	1.3	250.0	100.0		WL
	3750	TYKW	29	PBI	2134.0		20.0	2.0	.7		
	9400	TYKW	29	PBI	2134.0		20.0	6.0	2.0		
	3750	TYKW	5	S	2302.0	2303.2	8.0	2.0	.7		
	2000	TYKW	5	S	2302.5	2303.0	1.5	2.0	.7		
	3750	TYKW	5	S	2321.0	2321.8	11.0	2.0	.7		
	3750	TYKW	21	GRF	2356.0	0020.0	50.0	2.0	1.0		
06	208	VORO	44	NS	0000.0E		120.0D		2.0		
	245	LEAR	43	NS	0101.5	0843.8	525.5D	69.0			QL=6 ST=2 TYP=1
	29	UPIC	43	NS	0713.5		527.4				
	33	UPIC	43	NS	0713.7		527.3				
	245	PALE	43	NS	1643.0	2325.6	717.0D	86.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		360.0D		2.0		
	3750	TYKW	5	S	0030.0	0031.4	12.0	2.0	1.0		
	2000	TYKW	20	GRF	0100.0	0200.0	220.0	2.0	1.0		
	3750	TYKW	21	GRF	0136.0	0150.0	120.0	2.0	1.0		
	3750	TYKW	20	GRF	0154.0	0214.0	55.0	3.0	1.5		
	410	LEAR	4	S/F	0154.1	0157.1	3.9	35.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0155.5	0156.0	2.5	139.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0155.5	0157.0	2.0	35.0			QL=6 ST=2 TYP=3
	100	HIRA	42	SER	0155.6	0157.0	2.4	10000.0D			
	100	GORK	4	S/F	0308.5	0309.2	2.8	120.0D			
	100	HIRA	46	C	0308.6	0308.8	2.1	4200.0	460.0		WL
	3750	TYKW	5	S	0350.0	0351.0	5.0	2.0	.5		
	3750	TYKW	5	S	0414.0	0414.7	3.0	3.0	2.0		
	3750	TYKW	30	PBI	0417.0		23.0	1.5	1.0		
	3750	TYKW	5	S	0421.0	0422.2	3.0	2.0	.5		
	9400	TYKW	5	S	0448.0	0448.6	1.5	5.0	1.5		
	3750	TYKW	5	S	0454.0	0459.0	20.0	3.0	1.5		
	2000	TYKW	21	GRF	0530.0	0600.0	70.0	1.5	.7		
	2000	TYKW	5	S	0550.0	0550.7	2.0	1.5	.5		
	3750	TYKW	5	S	0550.0	0550.7	1.5	2.0	.7		
	410	LEAR	47	GB	0550.5	0550.6	1.0	56.0			QL=6 ST=3 TYP=5
	410	LEAR	8	S	0622.1	0622.3	.2	10.0			QL=6 ST=2 TYP=3
	2950	GORK	21	GRF	0637.0	0833.1	127.0	5.4			
	410	LEAR	47	GB	0702.3	0702.3	.2	54.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0702.3	0702.5	.3	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0713.3	0713.5	1.2	23.0			QL=6 ST=2 TYP=3
	100	GORK	8	S	0713.4	0713.5	.5	150.0D			
	245	LEAR	8	S	0713.5	0713.6	.1	27.0			QL=6 ST=2 TYP=3
	2000	TYKW	21	GRF	0730.0	0800.0	80.0	2.0	1.0		
	100	GORK	41	F	0737.3	0737.4	5.2	150.0			
	410	LEAR	47	GB	0737.3	0737.6	1.3	130.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0737.3	0737.6	1.3	78.0			QL=6 ST=2 TYP=5
	100	GORK			0737.3	0741.7		150.0D			
	100	GORK			0737.3	0742.3		150.0			
	113	POTS	4	S/F	0740.3	0740.4	.6	840.0	120.0		III
	610	LEAR	8	S	0741.1	0741.1	.2	10.0			QL=6 ST=2 TYP=3
	204	IZMI	41	F	0741.1	0741.2	1.5	380.0			
	245	LEAR	8	S	0741.1	0741.3	1.4	39.0			QL=6 ST=2 TYP=3
	100	HIRA	46	C	0741.1	0741.3	2.0	2800.0	410.0		ML
	536	ONDR	41	F	0741.6	0742.9	1.7	11.0			
	930	BORD	41	F	0742.3	0742.6	.4	40.0	2.0		
	1000	TYKW	8	S	0742.5	0742.6	.2	6.0	1.5		
	410	LEAR	47	GB	0752.6	0752.8	1.4	400.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0752.7	0753.2	5.0	7.0	2.5		
	1000	TYKW	45	C	0752.8	0753.2	5.0	8.0	2.5		INTERFERENCE
	2950	GORK	1	S	0752.9	0753.2	1.1	5.3			
	950	GORK	2	S/F	0752.9	0753.3	3.0	3.6			
	2840	PEKG	3	S	0752.9	0753.5	4.0	10.0	4.6		
	930	BORD	8	S	0753.0	0753.0	.1	25.0	1.0		

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06	2695	LEAR	4	S/F	0753.0	0753.1	3.6	11.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0753.5	0753.6	3.1	7.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0823.6	0823.8	.2	18.0			QL=6 ST=2 TYP=3
	204	IZMI	41	F	0828.0	0828.0	1.0	220.0			
	113	POTS	4	S/F	0828.0	0828.1	.6	3000.0	180.0		III
	245	LEAR	47	GB	0828.0	0828.3	1.1	100.0			QL=6 ST=2 TYP=5
	950	GORK	8	S	0829.0	0829.1	.5	33.0			
	1000	TYKW	5	S	0829.0	0829.2	.5	97.0	15.0		
	610	LEAR	47	GB	0829.1	0829.1	.2	58.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0829.1	0829.1	.2	22.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0829.1	0829.1	.2	15.0			QL=6 ST=2 TYP=3
	930	BORD	41	F	0830.4	0830.5	.4	95.0	2.0		
	410	LEAR	47	GB	0831.5	0831.6	1.0	230.0			QL=6 ST=2 TYP=5
	2950	GORK	21	GRF	0854.0	1021.2	186.0D	15.0			
	650	GORK	4	S/F	0953.0	0953.5	1.0	9.0			
	950	GORK	4	S/F	0953.1	0953.6	.8	29.0			
	8800	ATHN	8	S	1119.6	1120.3	2.0	43.0			QL=6 ST=2 TYP=3
	8400	BERN	3	S	1119.6	1120.5	4.0	31.0			
	11800	BERN	3	S	1119.6	1120.5	4.0	81.0			
	9100	GORK	3	S	1119.8	1120.5	1.5	33.0			
	6100	KISV	45	C	1120.0	1120.6	6.0	12.0			
	9500	POTS	3	S	1120.0	1120.9	2.0	29.0			
	6100	KISV			1120.0	1124.3		9.0			
	4995	ATHN	8	S	1120.1	1120.5	1.2	11.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1120.3	1120.5	.3	47.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1120.3	1120.6	.5	29.0			QL=6 ST=2 TYP=3
	9100	GORK	29	PBI	1121.3	1121.3	11.5	12.6			
	113	POTS	41	F	1121.8	1122.9	3.8	350.0	10.0		III
	100	GORK	4	S/F	1122.6	1122.8	9.0	100.0D			
	100	GORK	.		1122.6	1131.3		100.0D			
	2650	DWIN	2	S/F	1124.0	1124.0	1.0	25.0	10.0		
	410	SGMR	47	GB	1124.0	1124.1	1.1	390.0			QL=6 ST=2 TYP=5
	3000	POTS	4	S/F	1124.0	1125.0	2.0	18.0			
	2800	OTTA	4	S/F	1124.0	1125.0	2.0	17.4	10.4		
	2950	GORK	2	S/F	1124.0	1125.1	2.3	15.0			
	1470	POTS	4	S/F	1124.0	1125.2	3.0	10.0			
	650	GORK	4	S/F	1124.0	1125.2	3.6	10.0			
	2695	SGMR	8	S	1124.1	1124.8	.7	29.0			QL=6 ST=2 TYP=3
	950	GORK	1	S	1124.1	1125.1	4.7	5.0			
	536	ONDR	41	F	1124.5	1124.6	2.3	13.0			
	245	SGMR	8	S	1125.1	1125.3	.4	38.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1206.0	1206.2	1.5	3.4	1.7		
	1470	POTS	1	S	1206.0	1206.5	3.5	5.0			
	245	SGMR	8	S	1206.1	1206.1	.5	4000.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1206.1	1206.1	.2	100.0			QL=6 ST=2 TYP=5
	234	POTS	4	S/F	1206.1	1206.3	.6	25000.0	5000.0		
	610	SGMR	8	S	1206.1	1206.3	.5	48.0			QL=6 ST=2 TYP=3
	536	ONDR	41	F	1206.4	1206.4	3.8	14.0			
	127	TORN	8	S	1233.0	1233.6	1.5	670.0	340.0		
	245	SGMR	47	GB	1233.1	1233.1	.2	230.0			QL=6 ST=2 TYP=5
	9400	HUAN	21	GRF	1329.2	1347.0	127.4	5.8	4.0		0
	4995	ATHN	4	S/F	1333.6	1335.5	5.5	18.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1333.6	1335.6	4.9	31.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1333.6	1336.8	6.4	17.0			QL=6 ST=2 TYP=3
	2800	OTTA	40	F	1334.0	1336.0	4.0	40.0			
	930	BORD	42	SER	1334.0	1342.4	14.0	90.0	4.0		
	1470	POTS	42	SER	1334.0	1342.5	12.0	41.0			
	3000	POTS	42	SER	1334.0	1342.5	10.0	29.0			
	234	POTS	4	S/F	1335.4	1335.6	.9	950.0	190.0		
	2650	DWIN	41	F	1338.0	1348.0	15.0	40.0	10.0		
	9400	HUAN	2	S/F	1341.0	1342.5	3.4	11.7	8.1		0
	3200	BERN	4	S/F	1341.1	1342.4	10.0U	27.0			
	5200	BERN	4	S/F	1341.1	1342.4	10.0U	42.0			
	8400	BERN	4	S/F	1341.1	1342.4	10.0U	20.0			
	9500	POTS	1	S	1342.0	1342.4	1.5	7.0			
	2800	OTTA	4	S/F	1342.2	1342.5	3.5	39.0	6.5		
	1415	ATHN	47	GB	1343.1	1343.1	3.7	53.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1343.1	1343.3	3.0	47.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1343.1	1343.3	2.2	8.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1343.1	1343.3	2.2	39.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1347.3	1347.3	.3	70.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	113	POTS	4	S/F	1347.3	1347.4	.7	460.0	20.0		III
	410	SGMR	8	S	1347.3	1347.6	.3	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	2	S/F	1402.2	1405.0	4.1	7.8	1.9		0
	2800	OTTA	20	GRF	1435.0	1450.0	75.0	3.8	2.0		
	245	SGMR	8	S	1547.3	1547.6	.5	64.0			QL=6 ST=2 TYP=3
	930	BORD	41	F	1614.5	1614.8	.5	21.0	2.0		
	2800	OTTA	4	S/F	1631.2	1632.2	2.0	10.8			
	930	BORD	46	C	1631.3	1632.3	1.7	25.0	3.0		
	9400	HUAN	20	GRF	1641.1	1645.8	12.2	4.9	2.7		0
	245	SGMR	8	S	1903.5	1903.8	.5	30.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1917.3	1917.5	.3	23.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1917.3	1917.6	1.3	22.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1945.2	1946.7	2.0	2.4	1.2		
	1000	TYKW	21	GRF	2120.0	2215.0	240.0	4.0	2.0		
	9400	TYKW	21	GRF	2225.0	2251.0	90.0	4.0	1.5		
	500	HIRA	46	C	2231.0	2232.3	2.0	65.0	15.0		0
	1000	TYKW	5	S	2232.0	2232.8	3.0	2.0	.7		
	3750	TYKW	45	C	2321.0	2328.9	13.0	26.0	5.0		
	2695	PENT	4	S/F	2322.0	2328.9	14.0	30.0	5.6		
	610	LEAR	4	S/F	2323.3	2325.3	2.5	20.0			QL=6 ST=2 TYP=3
	500	HIRA	42	SER	2323.4	2328.0	16.0	130.0			WR
	410	LEAR	47	GB	2323.8	2324.0	1.3	70.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2323.8	2324.0	1.5	100.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	2323.8	2325.8	2.3	68.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	2325.0	2328.7	8.0	30.0	5.0		
	1000	TYKW	45	C	2325.0	2328.8	10.0U	53.0	5.0U		INTERFERENCE
	610	SGMR	4	S/F	2325.0	2328.6	5.8	34.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	2325.3	2325.3	.2	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	2326.0	2330.9	7.0	19.0	5.0		
	245	SGMR	8	S	2328.1	2328.6	2.0	36.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	2328.3	2328.5	.3	61.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2328.3	2328.5	1.3	130.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	2328.3	2328.5	1.3	93.0			QL=6 ST=2 TYP=5
	2695	PALE	4	S/F	2328.3	2328.6	2.7	33.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	2328.3	2328.6	2.7	82.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	2328.3	2328.6	1.3	55.0			QL=6 ST=2 TYP=5
	2695	LEAR	8	S	2328.3	2328.6	1.5	33.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	2328.3	2328.8	2.8	37.0			QL=6 ST=2 TYP=3
	1415	PALE	4	S/F	2328.3	2328.8	2.7	37.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	2328.3	2328.8	1.5	28.0			QL=6 ST=2 TYP=3
	100	HIRA	8	S	2328.4	2328.5	.4	720.0			ML
	610	LEAR	8	S	2328.6	2328.6	1.0	22.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2330.1	2330.3	1.7	18.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	2330.8	2331.1	1.2	22.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	2333.0		10.0	2.0	1.0		
	9400	TYKW	29	PBI	2333.0		17.0	5.0	2.5		
	3750	TYKW	29	PBI	2334.0		15.0	2.0	1.0		
	100	HIRA	42	SER	2335.4	2336.1	3.1	1600.0			WL
	245	LEAR	8	S	2337.6	2337.8	1.0	23.0			QL=6 ST=2 TYP=3
07	245	PALE	43	NS	1650.0	1830.6	703.0D	100.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2323.0	2323.3		100.0			QL=6 ST=2 TYP=1
	2000	TYKW	21	GRF	0012.0	0053.0	110.0	2.0	1.0		
	3750	TYKW	21	GRF	0030.0	0058.0	95.0	2.0	1.0		
	3750	TYKW	5	S	0120.0	0123.0	25.0	3.0	1.5		
	2000	TYKW	20	GRF	0120.0	0129.0	35.0	2.0	1.0		
	2000	TYKW	20	GRF	0124.6	0350.0	210.0	7.0	3.0		
	245	LEAR	8	S	0129.6	0129.8	.5	15.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0220.0	0343.0	190.0	12.0	5.0		
	3750	TYKW	5	S	0246.0	0247.0U	3.0	3.0D	1.0D		
	4995	LEAR	20	GRF	0246.3	0332.0	90.7	13.0			QL=6 ST=2 TYP=2
	8800	LEAR	20	GRF	0246.5	0332.0	114.5	17.0			QL=6 ST=2 TYP=2
	2695	LEAR	20	GRF	0249.6	0252.0	69.4	7.0			QL=6 ST=2 TYP=2
	3750	TYKW	45	C	0250.0	0250.9	3.0	3.0	1.5		
	1415	LEAR	20	GRF	0251.0	0347.0	65.0	7.0			QL=6 ST=2 TYP=2
	3750	TYKW	5	S	0310.0	0310.6	5.0	3.0	1.0		
	9400	TYKW	21	GRF	0315.0	0349.0	135.0	10.0	4.0		
	2950	GORK	20	GRF	0327.0E	0351.2	158.0D	17.0			
	3750	TYKW	5	S	0331.5	0332.2	2.0	3.0	1.0		
	6100	KISV	2	S/F	0504.6	0506.5	4.0	7.0			
	9395	PEKG	5	S	0505.0	0507.1	8.0	10.3	4.9		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	9400	TYKW	45	C	0506.0	0507.0	2.0	13.0	3.0		
	2840	PEKG	20	GRF	0506.0	0507.0	13.0	7.7	3.2		
	8800	LEAR	4	S/F	0506.1	0506.8	2.2	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0506.5	0506.9	1.5	5.0	1.5		
	410	LEAR	47	GB	0506.6	0506.8	1.0	169.0			QL=6 ST=2 TYP=5
	9100	GORK	1	S	0506.6	0507.0	1.6	1.5			
	2950	GORK	23	GRF	0608.0	0940.2	217.0D	17.0			
	950	GORK	20	GRF	0625.1	0632.5	11.0	6.7			
	9100	GORK	20	GRF	0627.0	0634.0	17.4	1.5			
	410	LEAR	8	S	0628.1	0628.3	.2	20.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	0629.1	0633.0	6.0	7.0			
	9400	TYKW	5	S	0631.0	0633.5	6.0	8.0	4.0		
	3750	TYKW	5	S	0632.0	0633.7	4.0	3.0	1.0		
	9400	TYKW	21	GRF	0645.0	0755.0	135.0D	8.0	5.0D		
	2000	TYKW	21	GRF	0710.0	0755.0	100.0U	4.0	2.0		INTERFERENCE
	3750	TYKW	21	GRF	0720.0U	0750.0	100.0U	6.0	3.0		INTERFERENCE
	2695	LEAR	20	GRF	0738.1	0753.1	17.9	11.0			QL=6 ST=2 TYP=2
	9395	PEKG	45	C	0803.0	0805.2	10.0D	45.0	19.2		
	2840	PEKG			0803.0	0807.6		52.0	25.4		
	9395	PEKG			0803.0	0807.6		60.0	24.1		
	9400	TYKW	45	C	0804.0	0807.4	6.0	66.0	17.0		
	2000	TYKW	45	C	0804.0	0807.5	6.0	25.0	7.0		
	1000	TYKW	45	C	0804.0	0807.6	7.0	93.0	8.0		
	3750	TYKW	45	C	0804.0	0807.6	9.0	42.0	7.0		
	1470	POTS	4	S/F	0804.0	0807.7	11.0	22.0			
	8400	BERN	45	C	0804.2	0807.4	9.0	71.0			
	5200	BERN	45	C	0804.2	0807.4	9.0	39.0			
	11800	BERN	45	C	0804.2	0807.4	9.0	91.0			
	19600	BERN	45	C	0804.2	0807.4	9.0	54.0			
	3200	BERN	45	C	0804.2	0807.6	9.0	43.0			
	6100	KISV			0804.3	0805.2		11.0			
	6100	KISV	45	C	0804.3	0807.5	6.0	23.0			
	2950	GORK	46	C	0804.4	0805.1	5.7	13.0			
	9100	GORK	45	C	0804.4	0805.1	6.0	38.0			
	9100	GORK			0804.4	0807.4		52.0			
	2950	GORK			0804.4	0807.5		35.5			
	3000	POTS	4	S/F	0804.5	0807.5	8.5	43.0			
	9500	POTS	4	S/F	0804.5	0807.5	7.5	50.0			
	500	HIRA	42	SER	0804.6	0804.6	3.0	110.0			WL
	8800	ATHN	8	S	0804.6	0804.8	.7	32.0			QL=6 ST=2 TYP=3
	4995	ATHN	8	S	0804.6	0804.8	.7	13.0			QL=6 ST=2 TYP=3
	2695	ATHN	8	S	0804.6	0804.8	.7	11.0			QL=6 ST=2 TYP=3
	15400	LEAR	47	GB	0804.8	0805.1	5.8	38.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0804.8	0805.1	6.0	42.0			QL=6 ST=2 TYP=5
	4995	LEAR	4	S/F	0804.8	0805.1	8.7	11.0			QL=6 ST=2 TYP=3
	950	GORK	46	C	0804.8	0806.3	7.3	34.0			
	950	GORK			0804.8	0807.4		70.0			
	2650	DWIN	2	S/F	0805.0	0807.0	5.0	38.0	15.0		
	930	BORD	46	C	0805.0	0807.4	5.0	135.0	5.0		
	610	LEAR	4	S/F	0805.0	0805.1	5.3	18.0			QL=6 ST=2 TYP=3
	410	LEAR	49	GB	0805.0	0805.1	2.6	510.0			QL=6 ST=2 TYP=6
	2695	LEAR	4	S/F	0805.0	0805.1	3.8	20.0			QL=6 ST=2 TYP=3
	650	GORK	46	C	0805.0	0805.2	3.2	10.0			
	650	GORK			0805.0	0807.4		12.0			
	1415	LEAR	4	S/F	0805.0	0807.5	6.1	33.0			QL=6 ST=2 TYP=3
	2840	PEKG	45	C	0805.2		10.0D	21.7	9.3		
	8800	MANI	4	S/F	0805.6	0808.4	4.4	89.3	29.8		
	2695	MANI	4	S/F	0805.7	0808.6	4.8	41.9	14.0		
	260	ONDR	41	F	0806.3	0807.8	2.1	10.0			
	8800	ATHN	8	S	0806.8	0807.3	1.3	32.0			QL=6 ST=2 TYP=3
	4995	MANI	4	S/F	0807.1	0808.6	2.4	30.0	10.0		
	650	GORK	29	PBI	0808.1	0808.1	19.5	3.5			
	1415	MANI	3	S	0808.3	0808.4	1.7	57.5	19.2		
	2000	TYKW	29	PBI	0810.0		20.0	3.0	1.0		
	9400	TYKW	29	PBI	0810.0		25.0	5.0	2.0		
	2840	PEKG	29	PBI	0813.0	0818.0	20.0D	6.5	3.2		
	6100	KISV	2	S/F	0937.4	0939.0	3.0	5.0			
	234	POTS	4	S/F	1142.3	1142.4	.6	5500.0	550.0		III
	204	IZMI	41	F	1142.3	1142.5	.8	7000.0			
	113	POTS	4	S/F	1142.4	1142.7	.4	110.0	15.0		III
	3000	POTS	20	GRF	1144.0	1205.7	139.0	45.0			

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	2800	OTTA	20	GRF	1145.0	1206.0	130.0	44.0	15.0		
	1470	POTS	20	GRF	1145.0	1210.9	140.0	13.0			
	2650	DWIN		GRF	1150.0	1300.0	70.0	35.0	15.0		
	3200	BERN	20	GRF	1155.0	1205.1	78.0	41.0			
	5200	BERN	20	GRF	1155.0	1210.2	78.0	46.0			
	8400	BERN	20	GRF	1155.0	1211.1	78.0	45.0			
	9500	POTS	20	GRF	1155.0	1214.0	125.0	28.0			
	11800	BERN	20	GRF	1155.0	1234.7	78.0	45.0			
	9400	HUAN	20	GRF	1155.6	1211.5	106.0	30.8	9.1		0
	2695	ATHN	20	GRF	1156.6	1206.0	28.2	38.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	1156.6	1206.8	30.9	30.0			QL=6 ST=2 TYP=2
	4995	ATHN	20	GRF	1156.6	1207.5	26.5	58.0			QL=6 ST=2 TYP=2
	1415	ATHN	20	GRF	1157.6	1206.6	27.2	9.0			QL=6 ST=2 TYP=2
	4995	SGMR	20	GRF	1200.6	1206.6	18.2	50.0			QL=6 ST=3 TYP=2
	2695	SGMR	20	GRF	1201.1	1206.3	16.7	52.0			QL=6 ST=3 TYP=2
	8800	SGMR	20	GRF	1201.1	1206.6	18.2	32.0			QL=6 ST=3 TYP=2
	15400	SGMR	20	GRF	1204.6	1205.6	14.2	37.0			QL=6 ST=3 TYP=2
	2800	OTTA	27AF	RF	1415.0		435.0	8.2	7.5		
	2800	OTTA	24	R	1415.0	1435.0	20.0	8.2	4.1		
	2800	OTTA	24P	R	1435.0		365.0	8.2			
	2800	OTTA	20	GRF	1445.0	1458.0	75.0	11.0	6.2		
	29	UPIC	4	S/F	1519.5	1519.5	.8				
	33	UPIC	45	C	1519.8	1519.9	.8				
	29	UPIC	45	C	1632.5	1632.6	.4				
	33	UPIC	45	C	1632.5	1632.6	1.6				
	9400	HUAN	2	S/F	1809.0	1811.2	3.5	6.7	3.4		0
	410	SGMR	8	S	1830.5	1830.8	.8	34.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	1830.6	1830.6	.2	100.0			QL=5 ST=2 TYP=5
	245	SGMR	8	S	1830.6	1831.1	1.2	31.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1831.0	1831.1	.5	90.0			QL=5 ST=2 TYP=5
	2800	OTTA	20	GRF	1950.0	2000.0	45.0	10.2	5.0		
	2800	OTTA	26	FAL	2040.0	2130.0	50.0	-8.2	-4.1		
	3750	TYKW	45	C	2140.0	2141.9	10.0	26.0	8.0		INTERFERENCE
	3750	TYKW			2140.0	2145.7		25.0			
	2800	OTTA	21	GRF	2140.0	2150.0	40.0	8.0	4.0		
	2000	TYKW	5	S	2141.0	2141.8	3.0	7.0	2.0		INTERFERENCE
	9400	HUAN	3	S	2141.2	2141.8	2.2	101.9	31.7		0
	15400	SGMR	8	S	2141.5	2141.8	1.6	45.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2141.5	2141.9	2.5	120.0	22.0		INTERFERENCE
	8800	SGMR	47	GB	2141.6	2141.8	.7	100.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	2141.8	2142.0	.3	34.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	2141.9	2142.0	1.5	9.6	4.4		
	9400	HUAN	29	PBI	2143.4	2143.4	30.9	9.6	5.0		0
	9400	TYKW	29	PBI	2144.0		15.0U	6.0	3.0		
	2000	TYKW	5	S	2144.0	2145.1	4.0	8.0	2.5		
	2800	OTTA	3	S	2144.0	2146.0	4.0	10.2	5.1		
	1000	TYKW	8	S	2145.0	2145.1	.2	11.0	4.0		
	3750	TYKW	29	PBI	2150.0		20.0	6.0	2.5		
	9400	TYKW	5	S	2201.9	2202.0	1.0	13.0	5.0		
	410	PALE	4	S/F	2215.0	2215.3	10.8	20.0			QL=6 ST=3 TYP=3
	245	PALE	47	GB	2215.0	2219.0	18.0	63.0			QL=6 ST=3 TYP=5
	1000	TYKW	21	GRF	2230.0	2345.0	300.0	3.0	1.5		
	2000	TYKW	45	C	2235.0	2236.8	5.0	6.0	2.0		
	3750	TYKW	5	S	2235.0	2236.8	5.0	14.0	5.0		
	2800	OTTA	1	S	2235.0	2237.0	5.0	7.2	3.6		
	9400	TYKW	5	S	2235.5	2236.8	5.0	29.0	10.0		
	1000	TYKW	45	C	2235.5	2237.3	4.0	78.0	9.0		
	8800	SGMR	8	S	2236.1	2236.3	1.0	27.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	2236.1	2236.8	1.0	22.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	2236.6	2236.6	.2	28.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2242.0	2242.4	1.0	3.0	1.0		
	3750	TYKW	21	GRF	2247.0	2317.0	120.0	6.0	3.0		
	9400	TYKW	21	GRF	2250.0	2318.0	110.0	7.0	3.0		
	2000	TYKW	21	GRF	2250.0	2340.0	120.0	3.0	1.5		
	2695	PENT	20	GRF	2250.0	2315.0	120.0	5.6	3.2		
	245	LEAR	8	S	2319.8	2320.0	1.3	40.0			QL=6 ST=2 TYP=3
	200	HIRA	8	S	2319.8	2320.1	.5	58.0			MR
	2000	TYKW	45	C	2320.0	2320.3	3.0	3.0	1.0		
	245	LEAR	8	S	2341.8	2342.1	1.0	24.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2349.5	2351.6	3.0	7.0	2.0		
08	33	UPIC	43	NS	0442.3		501.1				

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	29	UPIC	43	NS	0442.4	1115.0	500.9				
	245	SGMR	43	NS	1021.0	1146.8	791.0D	350.0			QL=6 ST=3 TYP=1
	3750	TYKW	5	S	0006.8	0007.2	1.5	3.0	.7		
	1000	TYKW	5	S	0007.6	0007.8	.5	2.5	.7		
	1000	TYKW	5	S	0008.9	0009.2	.6	3.0	1.0		
	2840	PEKG	3	S	0012.0	0017.0	11.0	13.1	5.9		
	9400	TYKW	45	C	0015.0	0018.1	5.0	17.0	6.0		
	9395	PEKG	20	GRF	0015.0	0029.0	29.0	4.7	.8		
	3750	TYKW	45	C	0015.5	0018.1	5.0	6.0	2.0		
	2000	TYKW	45	C	0016.0	0018.1	4.0	3.0	1.0		
	1000	TYKW	45	C	0016.0	0018.3	6.0	5.0	1.5		
	410	PALE	47	GB	0016.8	0017.3	1.0	270.0			QL=6 ST=2 TYP=5
	8800	LEAR	8	S	0017.8	0018.0	1.0	16.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0018.0	0018.1	1.1	30.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0018.3	0018.3	1.0	10.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0018.3	0018.3	1.0	10.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0020.0		15.0	6.0	3.0		
	2840	PEKG	20	GRF	0023.0	0029.0	23.0	12.2	6.2		
	3750	TYKW	5	S	0023.8	0024.1	2.0	2.0	1.0		
	245	PALE	47	GB	0024.1	0024.8	10.0	27.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0026.5	0028.8	7.0	54.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0027.0	0028.6	4.0	3.0	1.0		
	245	LEAR	47	GB	0027.3	0028.6	4.0	139.0			QL=6 ST=2 TYP=5
	9400	TYKW	45	C	0027.5	0028.6	4.5	10.0	4.0		
	410	LEAR	4	S/F	0028.1	0028.6	3.0	38.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0028.3	0028.6	3.8	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0037.0	0038.7	4.0	3.0	1.0		
	410	LEAR	4	S/F	0053.1	0054.0	2.9	18.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0053.8	0054.3	1.8	219.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0053.8	0054.5	1.5	10.0			QL=6 ST=2 TYP=3
	200	HIRA	45	C	0053.9	0054.2	.8	410.0	90.0		WR
	2000	TYKW	5	S	0054.0	0054.3	2.0	5.0	1.5		
	1000	TYKW	5	S	0054.0	0054.4	2.0	12.0	4.0		
	100	HIRA	46	C	0054.0	0054.3	1.7	530.0	158.0		ML
	610	LEAR	8	S	0054.3	0054.6	1.0	20.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0056.6	0056.8	.2	16.0			QL=6 ST=2 TYP=3
	2840	PEKG	28	PRE	0102.0	0128.0	60.0	7.3	2.3		
	9395	PEKG	28	PRE	0115.0	0128.0	47.0	8.1	3.2		
	3750	TYKW	5	S	0120.0	0127.0	14.0	2.0	1.0		
	1000	TYKW	45	C	0126.0	0127.9	5.0	21.0	2.0		
	9400	TYKW	45	C	0126.0	0127.9	5.0	5.0	1.5		
	3750	TYKW	45	C	0201.0	0204.5	10.0	155.0	28.0		
	208	VORO	46	C	0201.0	0205.0U	10.0	150.0D			
	9400	TYKW	28	PRE	0201.5	0203.5	2.0	3.0	1.5		
	2000	TYKW	45	C	0201.5	0204.4	11.5	114.0	27.0		
	500	HIRA	45	C	0201.6	0202.5	8.6	1000.0	100.0		WL
	245	PALE	47	GB	0201.8	0203.5	37.7	210.0			QL=2 ST=2 TYP=5
	610	PALE	4	S/F	0201.8	0203.6	24.3	22.0			QL=2 ST=2 TYP=3
	410	PALE	4	S/F	0201.8	0203.6	18.2	32.0			QL=2 ST=2 TYP=3
	2840	PEKG	4	S/F	0202.0	0204.4	13.0	157.0	27.0		
	9395	PEKG	47	GB	0202.0	0204.7	13.0	634.0			
	100	HIRA	48	C	0202.6		8.3	10000.0D	1900.0D		
	35000	NAGO	5	S	0203.0	0204.0	3.0	400.0			
	200	HIRA	48	C	0203.0	0206.1	7.3	36000.0	4410.0		0
	1415	PALE	4	S/F	0203.3	0203.6	22.8	34.0			QL=2 ST=2 TYP=3
	4995	PALE	4	S/F	0203.3	0203.6	22.8	40.0			QL=2 ST=2 TYP=3
	2695	PALE	4	S/F	0203.5	0203.6	22.6	40.0			QL=2 ST=2 TYP=3
	9400	TYKW	47	GB	0203.5	0204.7	3.5	625.0	170.0		
	2695	MANI	4	S/F	0203.5	0205.1	8.0	90.3	30.1		
	17000	NOBE	4	S/F	0203.7	0204.7	2.2	848.0			0
	1415	MANI	4	S/F	0204.0	0205.1	9.0	68.4	22.8		
	4995	MANI	3	S	0204.3	0205.4	3.2	58.6	19.5		
	606	MANI	47	GB	0204.5	0205.8	3.3	1169.1	389.7		
	17000	NOBE	29	PBI	0205.9	0205.9	6.0	33.0			0
	35000	NAGO	29	PBI	0206.0	0206.0	7.0	38.0			
	1000	TYKW	45	C	0206.5E	0206.5U	8.5D	67.0D	20.0D		
	9400	TYKW	29	PBI	0207.0		10.0	6.0	3.0		
	3750	TYKW	29	PBI	0211.0		20.0	3.0	1.0		
	2000	TYKW	29	PBI	0213.0		15.0	4.0	1.5		
	1000	TYKW	30	PBI	0215.0		25.0	5.0	2.0		
	9395	PEKG	30	PBI	0215.0	0218.5	71.0	9.0	2.8		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	2840	PEKG	30	PBI	0215.0	0232.0	85.0	4.3	.9		
	1000	TYKW	5	S	0224.6	0224.8	.8	1.5	.5		
	1000	TYKW	5	S	0226.2	0226.6	.8	1.5	.5		
	245	LEAR	8	S	0227.3	0227.5	1.0	43.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0246.0	0247.9	8.0	21.0	5.0		
	9395	PEKG	45	C	0246.0	0247.8	10.0	63.0	29.0		
	2840	PEKG	45	C	0246.0	0247.9	7.0	33.0	12.1		
	9400	TYKW	45	C	0246.5	0247.7	8.0	59.0	15.0		
	1000	TYKW	45	C	0246.5	0247.9	7.5	80.0	18.0		
	2000	TYKW	45	C	0246.5	0247.9	6.5	33.0	10.0		
	500	HIRA	5	S	0246.8	0247.3	11.0	10.0	4.0		ML
	17000	NOBE	7	C	0246.9	0247.8	4.0	54.0			R
	15400	LEAR	47	GB	0247.0	0247.8	7.1	67.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0247.0	0247.8	4.3	66.0			QL=6 ST=2 TYP=5
	4995	LEAR	4	S/F	0247.1	0247.8	3.7	26.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	0247.1	0248.3	3.2	67.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0247.3	0247.5	1.8	130.0			QL=6 ST=2 TYP=5
	2695	PALE	4	S/F	0247.3	0247.8	2.7	29.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	0247.3	0248.3	1.5	37.0			QL=6 ST=2 TYP=3
	1415	PALE	47	GB	0247.3	0248.3	6.5	57.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0247.3	0248.3	6.8	43.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0247.5	0247.6	2.8	100.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0247.5	0247.8	4.8	28.0			QL=6 ST=2 TYP=3
	4995	PALE	4	S/F	0247.5	0248.3	2.5	30.0			QL=6 ST=2 TYP=3
	610	PALE	4	S/F	0247.6	0247.6	3.7	26.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0247.6	0248.5	6.5	21.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0253.0		30.0	3.0	1.0		
	2840	PEKG	29	PBI	0253.0		8.0	2.1	.6		
	1000	TYKW	29	PBI	0254.0		20.0	6.0	1.5		
	9395	PEKG	29	PBI	0256.0	0259.2	10.0	3.6	1.1		
	3750	TYKW	5	S	0325.0	0325.9	4.0	1.5	.5		
	2950	GORK	23	GRF	0329.5	0455.3	259.0	13.0			
	9400	TYKW	5	S	0337.0	0340.0	15.0	3.0	1.5		
	3750	TYKW	5	S	0337.0	0347.0	20.0	2.5	1.0		
	2000	TYKW	5	S	0340.0	0349.0	25.0	1.5	.5		
	9400	TYKW	20	GRF	0405.0	0505.0U	170.0U	12.0U	5.0U		RAIN
	2000	TYKW	21	GRF	0430.0	0505.0	150.0	4.0	2.0U		INTERFERENCE
	3750	TYKW	21	GRF	0434.0	0505.0U	140.0	8.0U	4.0U		RAIN
	100	HIRA	42	SER	0442.1		1.7	10000.0D			
	9395	PEKG	20	GRF	0443.0	0519.6	110.0	13.0	5.2		
	2840	PEKG	21	GRF	0443.0	0543.2	110.0	10.7	3.5		
	9100	GORK	21	GRF	0444.3	0509.0	41.5	9.8			
	950	GORK	1	S	0516.7	0519.4	5.5	3.3			
	500	HIRA	45	C	0518.4	0518.6	1.0	20.0	10.0		ML
	3750	TYKW	5	S	0518.5U	0519.5	2.5U	18.0U	4.0U		RAIN
	410	LEAR	8	S	0518.8	0519.0	1.2	45.0			QL=6 ST=2 TYP=3
	100	GORK	46	C	0518.8	0519.1	1.5	80.0D			
	100	HIRA	46	C	0518.8	0519.3	.8	2400.0	610.0		WL
	245	LEAR	47	GB	0518.8	0519.3	1.2	86.0			QL=6 ST=2 TYP=5
	100	GORK			0518.8	0519.5		80.0D			
	200	GORK	4	S/F	0518.9	0519.4	1.8	35.0D			
	1415	LEAR	8	S	0519.0	0519.3	1.1	9.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0519.0	0519.5	1.0	28.0			QL=6 ST=2 TYP=3
	2840	PEKG	8	S	0519.0	0519.5	2.0	19.2	8.9		
	2950	GORK	1	S	0519.0	0519.6	1.3	18.0			
	6100	KISV	1	S	0519.1	0519.3	1.5	9.0			
	4995	LEAR	8	S	0519.1	0519.5	1.2	18.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0519.1	0519.5	1.7	13.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0519.3	0519.4	.5	7.7			
	650	GORK	1	S	0519.3	0519.5	3.5	4.0			
	3750	TYKW	45	C	0537.5U	0542.7	13.0U	10.0	2.0		
	2000	TYKW	5	S	0542.0	0543.0	2.5	2.0	1.0		
	950	GORK	20	GRF	0628.3	0633.9	8.0	4.2			
	200	GORK	2	S/F	0633.5	0633.6	.5	5.0			
	100	GORK	45	C	0633.5	0634.0	1.0	80.0D			
	100	GORK			0633.5	0634.1		80.0D			
	9395	PEKG	5	S	0651.4	0652.1	6.6	18.7	4.7		
	2840	PEKG	20	GRF	0652.0	0709.0	29.0	4.3	1.2		
	245	LEAR	47	GB	0659.1	0659.3	.4	280.0			QL=6 ST=2 TYP=5
	9500	POTS	3	S	0700.5	0701.0	1.1	17.0			
	5200	BERN	1	S	0700.5	0701.1	3.5	10.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	8400	BERN	3	S	0700.5	0701.1	3.5	30.0			
	9400	TYKW	5	S	0700.5	0701.1	1.5	25.0	6.0		
	11800	BERN	3	S	0700.5	0701.1	3.5	24.0			
	3750	TYKW	5	S	0700.5	0701.2	1.5	5.0	1.5		
	8800	LEAR	8	S	0700.6	0701.1	1.4	30.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0700.6	0701.1	1.4	23.3	5.4		
	6100	KISV	1	S	0700.6	0701.1	1.5	11.0			
	9100	GORK	1	S	0700.7	0701.0	26.0	13.0			
	9395	PEKG	29	PBI	0702.0	0706.4	15.0	5.6	1.3		
	410	LEAR	8	S	0802.6	0802.8	.2	10.0			QL=6 ST=2 TYP=3
	2950	GORK	20	GRF	0825.5	0832.1	23.0	4.0			
	410	LEAR	4	S/F	0831.8	0832.1	3.8	16.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	0835.0	0835.3	2.0	5.0			
	9100	GORK	1	S	0835.1	0835.3	.9	10.2	5.0		
	2950	GORK	23	GRF	0905.8	0928.3	51.0	6.0			
	260	ONDR	40	F	0906.8	0927.9	75.8	165.0			
	245	LEAR	47	GB	0907.0	0908.1	1.5	119.0			QL=6 ST=2 TYP=5
	204	IZMI	41	F	0907.8	0908.1	1.3	180.0			
	410	LEAR	8	S	0907.8	0908.8	1.8	6.0			QL=6 ST=2 TYP=3
	11800	BERN	22	GRF	0917.0	0932.0	120.0U	44.0			ONLY PAPER REC
	8400	BERN	22	GRF	0917.0	0932.0	120.0U	34.0			ONLY PAPER REC
	6100	KISV			0918.5	0919.4		6.0			
	6100	KISV			0918.5	0920.7		12.0			
	6100	KISV	46	C	0918.5	0927.4	15.0	17.0			
	9500	POTS	42	SER	0919.0	0931.8	21.0	2.6			
	9100	GORK	22	GRF	0919.0	0931.9	39.0D	28.0			
	8800	LEAR	8	S	0920.3	0920.6	1.0	19.0			QL=6 ST=2 TYP=3
	3000	POTS	3	S	0926.0	0927.5	2.0	34.0			
	410	LEAR	47	GB	0926.1	0927.3	2.2	96.0			QL=6 ST=2 TYP=5
	950	GORK	2	S/F	0926.2	0927.4	2.7	8.0			
	1470	POTS	3	S	0926.2	0927.6	3.8	15.0			
	2650	DWIN	1	S	0927.0	0927.0	1.0	42.0	20.0		
	2950	GORK	3	S	0927.1	0927.5	.8	33.0			
	245	LEAR	47	GB	0927.3	0927.3	.2	490.0			QL=6 ST=2 TYP=5
	2695	LEAR	8	S	0927.3	0927.3	1.2	33.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0927.3	0927.6	1.2	18.0			
	610	LEAR	8	S	0927.6	0928.3	1.0	17.0			QL=6 ST=2 TYP=3
	6100	KISV	29	PBI	0934.0	0934.0	13.0D	5.0			
	6100	KISV	21	GRF	0947.0	0954.0	25.0	3.0			
	2950	GORK	2	S/F	0947.4	0948.6	5.3	3.2			
	950	GORK	2	S/F	0947.7	0948.5	3.8	3.7			
	6100	KISV	1	S	0950.8	0951.2	1.0	5.0			
	6100	KISV	45	C	1020.4	1021.5	12.0	8.0			
	6100	KISV			1020.4	1024.0		7.0			
	234	POTS	4	S/F	1037.9	1038.1	2.7	775.0	13.0		
	536	ONDR	8	S	1038.0	1038.2	.6	318.0U			
	260	ONDR	40	F	1038.4	1038.4	98.0	126.0			
	204	IZMI	5	S	1050.6	1050.7	.5	280.0	180.0		
	410	SGMR	8	S	1114.0	1114.3	.8	17.0			QL=6 ST=2 TYP=3
	204	IZMI	41	F	1114.0	1115.0	2.0	150.0			
	245	SGMR	47	GB	1114.1	1114.1	.9	80.0			QL=6 ST=2 TYP=5
	234	POTS	4	S/F	1114.1	1114.3	1.0	140.0	2.0		III
	113	POTS	4	S/F	1114.6	1114.8	.5	385.0	25.0		III
	204	IZMI	41	F	1144.8	1147.0	4.0	600.0			
	2800	OTTA	1	S	1146.0	1148.0	2.5	4.4	2.2		
	234	POTS	4	S/F	1146.2	1146.8	1.4	140.0	3.0		III
	1470	POTS	4	S/F	1146.3	1147.3	2.7	7.5			
	113	POTS	4	S/F	1146.8	1147.9	1.2	100.0	6.0		III
	808	ONDR	4	S/F	1146.9	1147.2	3.2	21.0	15.0		
	2800	OTTA	20	GRF	1240.0	1245.0	90.0	15.6	7.8		
	260	ONDR	40	F	1330.4	1331.8	4.0	110.0			
	536	ONDR	8	S	1352.9	1352.9	.2	4.0			
	1415	ATHN	20	GRF	1538.6	1550.0	27.2	36.0			QL=6 ST=2 TYP=2
	2800	OTTA	3	S	1542.0	1548.5	15.0	60.0	35.0		
	2695	ATHN	20	GRF	1542.6	1548.6	25.5	51.0			QL=6 ST=2 TYP=2
	2650	DWIN	3	S	1543.0	1548.0	15.0	52.0	25.0		
	3200	BERN	20	GRF	1543.0	1548.4	50.0U	48.0			
	5200	BERN	20	GRF	1543.0	1548.4	50.0U	41.0			
	9400	HUAN	22	GRF	1543.2	1700.3	151.4	21.5	13.3		R
	4995	ATHN	20	GRF	1544.1	1549.6	24.2	37.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	1544.8	1549.3	24.8	28.0			QL=6 ST=2 TYP=2

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	1415	SGMR	4	S/F	1546.3	1548.3	4.5	30.0			QL=6 ST=2 TYP=3
	2695	SGMR	47	GB	1546.3	1548.3	6.2	61.0			QL=2 ST=3 TYP=5
	4995	SGMR	4	S/F	1546.3	1549.6	7.5	32.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1547.6	1549.3	3.4	28.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1548.1	1548.3	2.0	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	30	PBI	1557.0	1557.0	380.0	22.0	10.0		
	2800	OTTA	2	S/F	1647.7	1648.5	6.0	4.8	2.4		
	245	PALE	47	GB	1957.3	1957.3	1.2	92.0			QL=6 ST=2 TYP=5
	9400	TYKW	5	S	2207.5	2209.1	5.0	10.0	3.0		
	3750	TYKW	20	GRF	2243.0	2251.0	30.0	2.0	1.0		
	1000	TYKW	21	GRF	2305.0	2325.0	65.0	1.5	.7		
	3750	TYKW	5	S	2327.0	2329.5	25.0	3.0	1.0		
	200	HIRA	46	C	2327.7	2328.5	3.4	460.0	75.0		0
	500	HIRA	45	C	2327.7	2330.0	3.0	75.0	6.0		WL
	2000	TYKW	5	S	2328.0	2329.1	4.0	10.0	3.0		
	1000	TYKW	45	C	2328.0	2329.2	5.0	36.0	7.0		
	245	LEAR	47	GB	2328.0	2329.1	2.3	320.0			QL=6 ST=2 TYP=5
	410	LEAR	4	S/F	2328.1	2328.3	3.4	44.0			QL=6 ST=2 TYP=3
	2695	PENT	1	S	2328.5	2329.0	4.0	5.6	2.8		
	1415	LEAR	4	S/F	2329.0	2329.3	3.1	26.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	2329.1	2329.3	3.5	13.0			QL=6 ST=2 TYP=3
	100	HIRA	46	C	2329.1	2329.5	2.0	580.0	167.0		ML
	610	LEAR	47	GB	2329.6	2329.8	1.9	5.0			QL=6 ST=2 TYP=5
	245	PALE	8	S	2340.5	2341.1	1.1	42.0			QL=6 ST=3 TYP=3
09	3750	TYKW	20	GRF	0030.0	0056.0	65.0	5.0	2.0		
	2695	PENT	20	GRF	0040.0	0050.0	40.0	3.2	1.6		
	9400	TYKW	21	GRF	0043.0	0052.0	50.0	5.0	2.0		
	2000	TYKW	20	GRF	0044.0	0054.0	50.0	3.0	1.5		
	9400	TYKW	5	S	0108.0	0110.6	14.0	4.0	1.5		
	3750	TYKW	5	S	0145.0	0153.4	12.0	14.0	5.0		
	2000	TYKW	21	GRF	0146.0	0153.0	110.0	4.0	1.5		
	2840	PEKG	28	PRE	0146.0	0153.5	18.7	13.0	6.1		
	9395	PEKG	28	PRE	0147.0	0153.0	17.7	6.9			
	9400	TYKW	5	S	0151.5	0153.0	3.5	5.0	3.0		
	8800	LEAR	4	S/F	0151.8	0153.0	2.8	10.0			QL=6 ST=2 TYP=3
	17000	NOBE	20	GRF	0152.7	0206.9	40.0	19.0			0
	4995	LEAR	4	S/F	0152.8	0153.1	3.2	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0155.0		60.0	3.0	1.5		
	3750	TYKW	30	PBI	0157.0		80.0	6.0	3.0		
	9400	TYKW	5	S	0202.2	0202.4	.5	14.0	4.0		
	3750	TYKW	45	C	0204.0	0205.2	6.0	56.0	17.0		
	9400	TYKW	5	S	0204.5	0205.2	2.5	89.0	22.0		
	8800	LEAR	47	GB	0204.6	0205.1	6.5	110.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0204.6	0205.1	7.2	98.0			QL=6 ST=2 TYP=5
	9395	PEKG			0204.7	0205.1	83.0				
	2840	PEKG	45	C	0204.7	0205.2	11.00	28.0			
	2840	PEKG			0204.7	0206.1	45.0	20.6			
	9395	PEKG	45	C	0204.7	0206.1	3.0	17.4	8.2		
	1000	TYKW	5	S	0205.0	0205.8	4.0	3.0	1.0		
	2000	TYKW	45	C	0205.0	0206.2	4.0	25.0	10.0		
	15400	LEAR	8	S	0205.0	0205.1	1.0	19.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0205.1	0205.6	5.9	40.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0205.8	0206.1	2.2	10.0			QL=6 ST=2 TYP=3
	4995	MANI	4	S/F	0206.0	0206.5	2.0	77.1	25.7		
	2695	MANI	4	S/F	0206.0	0207.6	4.3	48.9	16.3		
	1415	MANI	3	S	0207.3	0207.6	1.7	13.3	4.4		
	9395	PEKG	29	PBI	0207.7	0208.5	17.3	9.1	3.2		
	9400	TYKW	5	S	0208.0	0208.2	.6	28.0	5.0		
	2000	TYKW	29	PBI	0209.0		25.0	4.0	1.5		
	3750	TYKW	29	PBI	0210.0		20.0	6.0	2.5		
	9400	TYKW	5	S	0214.0	0214.2	.5	22.0	6.0		
	9400	TYKW	5	S	0214.5	0215.2	1.5	3.0	1.0		
	2000	TYKW	5	S	0248.0	0250.0	15.0	1.5	.7		
	1000	TYKW	5	S	0251.5	0251.8	.6	2.5	.7		
	2950	GORK	23	GRF	0331.0	0654.0	374.0	26.0			
	3750	TYKW	21	GRF	0454.0	0625.0	240.0	3.0	1.5		
	2000	TYKW	28	PRE	0620.0	0647.0	27.0	5.0	1.5		
	2840	PEKG	40	F	0625.0	0635.6	21.0	13.6	5.1		
	9395	PEKG	40	F	0628.0	0635.6	18.0	17.3	7.0		
	3750	TYKW	28	PRE	0634.0	0644.0	12.0	5.0	2.5		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	950	GORK	20	GRF	0641.5	0649.5	16.7	9.6			
	9400	TYKW	45	C	0644.0	0651.8	26.0	26.0	12.0		
	1470	POTS			0645.0E		190.0D				
	3000	POTS			0645.0E		190.0D				
	9500	POTS			0645.0E		45.0D				
	3750	TYKW	45	C	0646.0	0648.8	9.0	49.0	23.0		
	3750	TYKW			0646.0	0649.3		49.0			
	2840	PEKG	45	C	0646.0	0649.3	10.0	63.0	32.0		
	6100	KISV	46	C	0646.0	0649.3	9.0	27.0			
	9395	PEKG	5	S	0646.0	0651.8	9.0	29.6	15.0		
	3100	CRIM	3	S	0646.5	0649.4	10.0	46.0	12.0		
	5200	BERN	45	C	0646.6	0649.3	30.0U	50.0			
	3200	BERN	45	C	0646.6	0649.3	30.0U	44.0			
	2650	DWIN	1	S	0647.0	0648.0	8.0	50.0	25.0		
	2000	TYKW	5	S	0647.0	0649.3	9.0	53.0	22.0		
	1000	TYKW	5	S	0647.0	0649.4	6.0	11.0	5.0		
	2695	MANI	4	S/F	0647.0	0649.3	8.0	58.8	19.6		
	1415	MANI	3	S	0647.0	0649.4	5.5	35.7	11.9		
	2695	LEAR	47	GB	0647.6	0649.3	8.5	54.0			QL=6 ST=2 TYP=5
	2695	ATHN	47	GB	0647.6	0649.8	19.5	53.0			QL=6 ST=2 TYP=5
	1415	ATHN	4	S/F	0647.6	0649.8	14.5	38.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0647.8	0649.3	9.8	47.0			QL=6 ST=2 TYP=3
	4995	MANI	3	S	0647.9	0649.0	4.6	80.6	26.9		
	2950	GORK	4	S/F	0648.0	0649.5	5.4	37.0			
	9100	GORK	22	GRF	0648.2	0651.9	19.3	23.0			
	4995	ATHN	4	S/F	0648.3	0649.6	15.3	33.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0648.3	0650.1	20.3	38.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0648.6	0649.3	4.0	40.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0648.8	0650.0	9.8	29.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0649.3	0650.0	1.0	17.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0653.0		40.0	3.0	1.0		
	6100	KISV	29	PBI	0654.8	0654.8	90.0U	14.0			
	3750	TYKW	30	PBI	0655.0		105.0	15.0	7.0		
	9395	PEKG	30	PBI	0655.0		123.0	13.8	6.1		
	2000	TYKW	29	PBI	0656.0		110.0	12.0	5.0		
	2840	PEKG	29	PBI	0656.0	0658.0	144.0	20.3	11.0		
	9400	TYKW	29	PBI	0710.0		80.0	12.0	6.0		
	9395	PEKG	3	S	0718.0	0718.7	2.0	11.4	4.8		
	3750	TYKW	5	S	0750.0	0756.0	20.0	3.0	1.0		
	536	ONDR	8	S	0914.5	0914.5	.2	22.0			
	260	ONDR	40	F	0928.6	0928.6	5.0	3.0			
	536	ONDR	42	SER	0934.6	0934.9	6.7	31.0			
	2950	GORK	22	GRF	1051.0	1145.0	69.0	3.9			
	260	ONDR	40	F	1126.8	1127.2	3.2	8.0			
	9400	HUAN	2	S/F	1219.5	1221.0	3.7	8.6	2.8		R
	1470	POTS	2	S/F	1243.5	1244.0	2.5	5.5			
	6100	KISV	4	S/F	1250.0	1252.9	7.0	15.0			
	4995	ATHN	4	S/F	1250.6	1252.1	3.7	25.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1251.0	1251.8	2.6	17.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	1251.0	1253.0	18.0	10.8	3.6		
	3200	BERN	4	S/F	1251.3	1252.4	7.0	18.0			ONLY PAPER REC
	5200	BERN	4	S/F	1251.3	1252.4	7.0	29.0			ONLY PAPER REC
	536	ONDR	42	SER	1354.4	1356.8	6.5	48.0			
	2800	OTTA	4	S/F	1532.5	1534.2	2.5	30.0	11.0		
	3200	BERN	45	C	1533.4	1534.2	3.5	39.0			
	2800	OTTA	29	PBI	1535.0	1535.0	25.0	6.4	3.2		
	2650	DWIN	3	S	1538.0	1539.0	2.0	110.0	50.0		
	2800	OTTA	21	GRF	1710.0	1755.0	170.0	18.6	9.3		
	9400	HUAN	20	GRF	1723.7	1800.0	95.1	12.1	6.0		0
	2800	OTTA	1	S	1753.0	1753.5	1.0	3.0	1.5		
	2000	TYKW	45	C	2125.0	2131.3	35.0	21.0	9.0		
	3750	TYKW	45	C	2125.0	2133.6	35.0	26.0	10.0		
	2800	OTTA	21	GRF	2125.0	2147.0	40.0	17.2	8.0		
	1000	TYKW	45	C	2130.0	2133.9	6.0	60.0	5.0		
	9400	TYKW	45	C	2130.0	2135.2	9.0	22.0	8.0		
	2800	OTTA	45	C	2130.8	2133.6	5.0	16.4	8.4		
	9400	HUAN	1	S	2130.9	2134.5	7.3	17.3	8.8		R
	2695	PALE	8	S	2131.0	2131.3	1.6	20.0			QL=6 ST=2 TYP=3
	4995	PALE	4	S/F	2131.0	2133.1	5.1	19.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	2131.1	2133.1	5.7	28.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	2131.3	2131.3	.2	33.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	1415	PALE	8	S	2131.3	2131.3	1.0	28.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	2131.5	2131.6	2.5	39.0			QL=6 ST=2 TYP=3
	15400	PALE	4	S/F	2132.1	2132.5	5.7	20.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2133.8	2134.1	1.2	18.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	2134.0	2134.1	1.6	28.0			QL=6 ST=2 TYP=3
	1000	TYKW	20	GRF	2137.0	2143.5	85.0U	5.0	1.5		INTERFERENCE
	9400	TYKW	30	PBI	2139.0		30.0	6.0	3.0		
	9400	TYKW	5	S	2141.0	2148.0	20.0	8.0	4.0		
	2000	TYKW	30	PBI	2200.0		210.0	5.0	2.5		
	3750	TYKW	30	PBI	2200.0		140.0	3.0	1.5		
	9400	TYKW	5	S	2311.8	2312.4	1.5	15.0	4.0		
	3750	TYKW	45	C	2312.0	2312.2	1.5	5.0	1.5		
	2000	TYKW	5	S	2312.0	2312.5	2.0	5.0	1.5		
	2840	PEKG	1	S	2312.0	2312.5	2.0	1.0	.9		
	9395	PEKG	1	S	2312.0	2312.5	1.0	8.5	4.2		
	2695	PENT	1	S	2312.0	2312.5	2.0	4.6	2.3		
	1000	TYKW	45	C	2320.5	2320.9	1.5	34.0	6.0		
10	208	VORO	44	NS	2100.0E		360.0D		2.0		
	3750	TYKW	21	GRF	0130.0	0225.0	220.0	10.0	4.0		
	2000	TYKW	21	GRF	0140.0	0340.0	310.0	3.0	1.5		
	2000	TYKW	20	GRF	0205.0	0215.0	30.0	3.0	1.5		
	9400	TYKW	20	GRF	0212.0	0223.0	60.0	4.0	2.0		
	1000	TYKW	5	S	0255.0	0255.9	2.0	1.5	.5		
	950	GORK	4	S/F	0338.7	0339.2	1.3	45.0			
	2950	GORK	21	GRF	0359.1	0426.7	70.0	4.6			
	3750	TYKW	5	S	0425.0	0425.6	2.0	17.0	5.0		
	2000	TYKW	5	S	0425.0	0425.7	2.0	2.0	.7		
	2840	PEKG	5	S	0425.0	0425.7	3.0	14.9	8.2		
	2695	LEAR	4	S/F	0425.1	0425.6	2.5	15.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0425.2	0425.8	1.2	12.0			
	4995	LEAR	8	S	0425.3	0425.6	1.0	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	29	PBI	0427.0		11.0	2.0	1.0		
	245	LEAR	47	GB	0447.1	0450.1	4.0	70.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0448.0	0449.0	5.0	1.5	.5		
	9100	GORK	21	GRF	0509.6	0532.5	203.0	31.0			
	2840	PEKG	21	GRF	0510.0	0534.0	77.0	30.7	11.1		
	2950	GORK	21	GRF	0511.5	0534.0	67.0	27.0			
	2000	TYKW	45	C	0512.0	0517.3	10.0	18.0	6.0		
	3750	TYKW	45	C	0512.5	0517.8	10.5	32.0	12.0		
	6100	KISV			0512.8	0518.0		10.0			
	6100	KISV	45	C	0512.8	0529.2	23.0	30.0			
	2840	PEKG	45	C	0513.0	0517.8	8.0	33.0	12.5		
	9395	PEKG	22	GRF	0514.0	0533.5	75.0	27.2	10.0		
	9400	TYKW	28	PRE	0515.0	0519.0	10.0	10.0	6.0		
	4995	ATHN	4	S/F	0515.8	0517.1	5.5	20.0			QL=6 ST=3 TYP=3
	1000	TYKW	45	C	0516.0	0517.3	23.0	16.0	6.0		
	1415	ATHN	4	S/F	0516.0	0516.5	3.5	13.0			QL=6 ST=3 TYP=3
	2695	ATHN	4	S/F	0516.0	0517.0	6.0	23.0			QL=6 ST=3 TYP=3
	500	HIRA	42	SER	0516.3	0518.5	4.0	80.0			SR
	245	LEAR	47	GB	0516.5	0516.8	1.5	52.0			QL=4 ST=2 TYP=5
	2950	GORK	4	S/F	0516.5	0518.2	4.4	24.0			
	3200	BERN	22	GRF	0516.5	0529.2	27.0	49.0			
	5200	BERN	22	GRF	0516.5	0529.3	27.0	46.0			
	2695	LEAR	4	S/F	0516.6	0518.0	4.2	33.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0516.6	0519.6	5.7	9.0			
	950	GORK	20	GRF	0516.8	0517.4	25.6	13.0			
	4995	LEAR	4	S/F	0517.5	0518.0	3.3	16.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0517.8	0518.1	3.0	10.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0517.8	0519.0	3.0	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0518.8	0519.1	.7	42.0			QL=4 ST=3 TYP=3
	245	LEAR	8	S	0518.8	0519.1	.7	42.0			QL=4 ST=2 TYP=3
	610	LEAR	47	GB	0519.0	0519.1	1.8	119.0			QL=4 ST=2 TYP=5
	2950	GORK	21	GRF	0521.0	0526.4	28.0	6.7			
	2695	LEAR	20	GRF	0521.8	0529.1	26.0	27.0			QL=6 ST=3 TYP=2
	4995	LEAR	20	GRF	0521.8	0529.1	26.0	24.0			QL=6 ST=3 TYP=2
	8800	LEAR	20	GRF	0521.8	0532.5	24.5	29.0			QL=6 ST=2 TYP=2
	15400	LEAR	20	GRF	0521.8	0533.1	24.8	24.0			QL=6 ST=2 TYP=2
	2000	TYKW	30	PBI	0522.0		60.0	4.0	2.0		
	3750	TYKW	30	PBI	0523.0		70.0	12.0	6.0		
	2950	GORK	1	S	0523.3	0524.5	26.0	12.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	2000	TYKW	45	C	0524.0	0529.2	15.0	14.0	6.0		
	17000	NOBE	20	GRF	0524.2	0532.3	42.0	28.0			0
	3750	TYKW	45	C	0524.5	0529.2	20.5	33.0	12.0		
	9400	TYKW	5	S	0525.0	0536.0	25.0	26.0	17.0		
	2840	PEKG	45	C	0525.0	0529.2	12.0	28.0	5.2		
	2950	GORK	4	S/F	0528.0	0529.3	4.2	20.0			
	6100	KISV	29	PBI	0536.0	0536.0	35.0	18.0			
	2000	TYKW	29	PBI	0539.0		40.0	5.0	2.0		
	1000	TYKW	29	PBI	0539.0		110.0	2.0	1.0		
	3750	TYKW	29	PBI	0545.0		9.0	2.0	1.0		
	9400	TYKW	29	PBI	0550.0		40.0	13.0	6.0		
	3750	TYKW	5	S	0555.0	0556.0	4.0	6.0	2.0		
	2840	PEKG	28	PRE	0658.0	0720.2	25.0	7.3	2.6		
	9395	PEKG	28	PRE	0712.0	0716.6	11.0	13.8	6.2		
	2000	TYKW	20	GRF	0715.0	0724.3U	80.0	5.0	1.5		INTERFERENCE
	3750	TYKW	28	PRE	0717.0	0718.5	6.0	4.0	2.0		
	4995	ATHN	47	GB	0722.0	0723.3	5.8	79.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	0722.5	0723.3	1.8U	76.0			QL=6 ST=2 TYP=5
	5200	BERN	3	S	0722.8	0724.1	21.0	112.0			
	11800	BERN	3	S	0722.8	0724.1	21.0	59.0			
	8400	BERN	3	S	0722.8	0724.1	21.0	100.0			
	3200	BERN	20	GRF	0722.8	0724.2	21.0	37.0			
	9400	TYKW	5	S	0723.0	0724.2	3.0	63.0	20.0		
	3750	TYKW	5	S	0723.0	0724.3	5.0	41.0	15.0		
	6100	KISV	4	S/F	0723.0	0724.2	2.0	81.0			
	9395	PEKG	3	S	0723.0	0724.2	3.3	59.1	24.0		
	3000	POTS	3	S	0723.0	0724.3	6.0	18.0			
	2840	PEKG	3	S	0723.0	0724.4	8.0	20.2	10.1		
	4995	LEAR	47	GB	0723.3	0724.1	4.2	76.0			QL=6 ST=2 TYP=5
	9500	POTS	3	S	0723.5	0724.2	4.5	40.0			
	4995	MANI	3	S	0723.5	0724.6	3.0	105.7	35.2		
	8800	LEAR	47	GB	0723.6	0724.1	2.5	82.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0723.6	0724.4	3.0	38.0			R
	2695	LEAR	8	S	0723.8	0724.3	1.5	17.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0723.8	0724.3	2.0	32.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	0723.8	0724.8	2.2	11.0	3.7		
	9400	TYKW	29	PBI	0726.0		25.0	10.0	4.0		
	9395	PEKG	29	PBI	0726.3	0727.3	33.0	9.2	4.3		
	3750	TYKW	29	PBI	0728.0		45.0	9.0	4.0		
	2840	PEKG	29	PBI	0731.0	0738.0	31.0	10.1	4.8		
	410	LEAR	8	S	0746.0	0746.1	.5	15.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0746.0	0746.3	.5	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0759.0	0759.1	.8	17.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0759.0	0759.1	.8	21.0			QL=6 ST=2 TYP=3
	2950	GORK	23	GRF	0903.0	0936.3	177.0	9.5			
	3000	POTS	20	GRF	0925.0	0935.8	35.0	13.0			
	9100	GORK	21	GRF	1024.0	1027.6	96.0D	27.0			
	6100	KISV	45	C	1026.0	1028.5U	13.0	50.0D			
	2650	DWIN	1	S	1027.0	1028.0	3.0	35.0	15.0		
	204	IZMI	41	F	1027.0	1028.0	2.0	750.0			
	2950	GORK	4	S/F	1027.0	1028.2	3.1	37.0			
	260	ONDR	41	F	1027.0	1028.3	4.2	101.0			
	9395	PEKG	45	C	1027.0	1028.5	4.0D	74.0D	34.2		
	234	POTS	4	S/F	1027.4	1028.4	1.3	1400.0	60.0		
	3000	IZMI	7	C	1027.4	1029.0	3.0	23.0	14.0		
	410	SGMR	47	GB	1027.6	1027.8	.5	320.0			QL=6 ST=2 TYP=5
	930	BORD	3	S	1027.6	1028.2	5.4	36.0	13.0		
	19600	BERN	4	S/F	1027.6	1028.4	19.0	53.0			
	11800	BERN	4	S/F	1027.6	1028.4	19.0	251.0			
	8400	BERN	4	S/F	1027.6	1028.5	19.0	382.0			
	536	ONDR	4	S/F	1027.7	1028.3	2.2	22.0			
	610	SGMR	8	S	1027.8	1028.1	.5	27.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	1028.0	1028.5	1.7	260.0			
	245	SGMR	47	GB	1028.3	1028.3	.3	119.0			QL=6 ST=2 TYP=5
	808	ONDR	4	S/F	1028.3	1028.5	6.2	22.0			
	127	TORN	42	SER	1051.6	1052.4	33.3	60.0			
	6100	KISV	2	S/F	1054.0	1054.9	1.5	10.0			
	2950	GORK	1	S	1054.2	1055.0	1.7	9.5			
	3000	IZMI	5	S	1054.5	1055.0	1.2	8.0	4.0		
	127	TORN	7	C	1102.7	1103.4	1.5	20.0	10.0		
	260	ONDR	41	F	1137.9	1138.7	2.1	10.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	8400	BERN	3	S	1138.1	1139.4	36.0	119.0			
	5200	BERN	3	S	1138.1	1139.4	36.0	250.0			
	11800	BERN	3	S	1138.1	1139.5	36.0	66.0			
	3000	BERN	3	S	1138.1	1139.6	36.0	267.0			
	930	BORD	8	S	1312.2	1312.3	.2	47.0	1.0		
	2800	OTTA	23	GRF	1315.0	1335.0	105.0	11.2			
	4995	ATHN	47	GB	1318.1	1319.3	2.9	54.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1318.3	1319.6	2.7	13.0			QL=6 ST=2 TYP=3
	8800	ATHN	8	S	1318.6	1319.1	1.0	21.0			QL=6 ST=2 TYP=3
	8400	BERN	4	S/F	1319.7	1320.9	13.0	29.0			
	4995	SGMR	4	S/F	1319.8	1320.8	3.5	50.0			QL=6 ST=2 TYP=3
	2650	DWIN	1	S	1320.0	1320.0	1.0	15.0	5.0		
	9400	HUAN	1	S	1320.0	1321.0	2.8	13.8	8.9		R
	2800	OTTA	4	S/F	1320.0	1321.0	2.0	10.0	5.0		
	3000	POTS	4	S/F	1320.0	1321.0	3.5	17.0			
	2695	SGMR	8	S	1320.5	1320.8	1.3	31.0			QL=6 ST=2 TYP=3
	9500	POTS	1	S	1320.5	1321.0	1.5	9.0			
	8800	SGMR	8	S	1320.6	1320.8	.4	17.0			QL=6 ST=2 TYP=3
	3000	BERN	3	S	1326.0	1327.4	15.0	19.0			
	1470	POTS	20	GRF	1332.0	1334.0	4.3	7.0			
	930	BORD	8	S	1359.4	1359.4	.1	30.0	1.0		
	930	BORD	8	S	1406.3	1406.4	.3	24.0	3.0		
	410	SGMR	8	S	1436.3	1436.6	.3	38.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1436.5	1438.0	6.0	3.6	1.6		
	3000	BERN	3	S	1438.9	1439.4	4.0	13.0			
	5200	BERN	3	S	1438.9	1439.4	4.0	18.0			
	4995	ATHN	47	GB	1458.8	1500.3	2.8	50.0			QL=6 ST=3 TYP=5
	2800	OTTA	21	GRF	1500.5	1525.0	60.0	5.4	3.6		
	2800	OTTA	1	S	1500.8	1501.2	2.0	8.0	4.0		
	4995	SGMR	4	S/F	1500.8	1501.3	2.3	49.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1501.6	1502.6	1.0	26.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	1522.0	1534.5	22.2	5.9	3.1		0
	2800	OTTA	20	GRF	1650.0	1830.0	140.0	5.4	2.5		
	9400	HUAN	20	GRF	1809.6	1829.4	50.9	9.9	6.2		0
	2800	OTTA	20	GRF	2005.0	2100.0	100.0	5.4	2.5		
	1000	TYKW	21	GRF	2235.0	2350.0	250.0	5.0	2.5		
	2695	PENT	22	GRF	2245.0	2305.0	195.0	11.0	6.6		
	3750	TYKW	45	C	2246.0	2305.4	26.0	11.0	6.0		
	2000	TYKW	45	C	2250.0	2305.6	20.0	7.0	2.0		
	9400	TYKW	20	GRF	2250.0	2310.0	180.0	4.0	2.0		
	2000	TYKW	30	PBI	2310.0		150.0	4.0	2.0		
	3750	TYKW	30	PBI	2312.0		200.0	6.0	3.0		
	3750	TYKW	5	S	2315.0	2316.8	10.0	5.0	1.5		
	1000	TYKW	45	C	2340.0	2342.5	3.0	30.0	1.5		
	2000	TYKW	21	GRF	2346.0	0010.0	100.0	2.0	1.0		
	3750	TYKW	21	GRF	2349.0	2358.0	100.0	4.0	2.0		
11	208	VORO	44	NS	2200.0E		300.00		3.0		
	245	LEAR	43	NS	2314.0	2341.1		32.0			QL=6 ST=1 TYP=1
	1000	TYKW	45	C	0020.0	0022.4	5.0	10.0	2.0		
	3750	TYKW	21	GRF	0020.0	0025.0	60.0	3.0	1.5		
	2000	TYKW	5	S	0023.0	0025.0	6.0	2.0	.7		
	500	HIRA	46	C	0030.2	0030.3	1.0	3400.0	300.0		
	3750	TYKW	5	S	0034.0	0037.0	10.0	2.0	1.0		
	2000	TYKW	5	S	0035.0	0037.0	8.0	2.5	1.0		
	1000	TYKW	45	C	0304.5	0305.6	1.5	4.0	1.0		
	2000	TYKW	20	GRF	0320.0	0335.0	60.0	1.5	.7		
	2950	GORK	23	GRF	0327.0	0849.8	389.0	9.4			
	950	GORK	4	S/F	0333.9	0334.3	.9	46.0			
	3750	TYKW	5	S	0356.0	0358.0	6.0	3.0	1.0		
	2840	PEKG	21	GRF	0451.0	0501.0	95.0	7.9	2.8		
	2000	TYKW	5	S	0459.0	0501.0	11.0	2.5	1.0		
	2840	PEKG	1	S	0544.0	0547.2	8.0	6.0	2.2		
	3750	TYKW	5	S	0546.0	0547.0	2.0	7.0	4.0		
	2000	TYKW	5	S	0546.0	0547.2	4.0	3.0	1.0		
	2950	GORK	1	S	0547.2	0548.0	1.3	4.0			
	3750	TYKW	29	PBI	0548.0		11.0	3.0	1.5		
	2000	TYKW	5	S	0618.0	0619.0	3.0	3.0	1.5		
	1000	TYKW	5	S	0618.0	0619.0	2.5	2.5	1.0		
	3750	TYKW	5	S	0618.0	0619.0	3.0	3.0	1.0		
	2840	PEKG	1	S	0618.0	0619.0	3.0	7.9	2.4		

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11	410	LEAR	8	S	0618.6	0618.8	1.0	31.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0644.0	0646.0	8.0	3.0	1.0		
	2695	LEAR	8	S	0844.0	0845.1	1.8	11.0			QL=6 ST=2 TYP=3
	2840	PEKG	21	GRF	0844.0	0847.6	24.0	9.9	2.8		
	9395	PEKG	21	GRF	0844.0	0847.6	21.0	5.1	1.4		
	3000	POTS	40	F	0844.0	0849.0	14.0	19.0			
	6100	KISV	23	GRF	0844.0	0852.0	40.0	3.0			
	4995	LEAR	8	S	0844.3	0845.1	1.2	15.0			QL=6 ST=2 TYP=3
	9395	PEKG	1	S	0844.7	0845.2	1.3	5.1	1.9		
	8800	LEAR	8	S	0844.8	0845.0	.5	7.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0844.8	0845.1	1.5	4.0			
	2840	PEKG	1	S	0845.0	0845.1	1.0	7.9	3.1		
	2950	GORK	1	S	0845.4	0845.7	1.2	6.7			
	6100	KISV	1	S	0847.0	0847.6	1.5	3.0			
	2950	GORK	1	S	0847.6	0848.2	1.6	3.0			
	9100	GORK	20	GRF	0910.3	0910.5	12.1	6.3	3.0		
	2950	GORK	23	GRF	1002.6	1151.0	117.0	14.0			
	204	IZMI	41	F	1043.0	1048.0	5.0	42.0			
	127	TORN	7	C	1043.6	1044.2	2.0	40.0	20.0		
	29	UPIC	4	S/F	1043.7	1043.9	.7				
	260	ONDR	4	S/F	1043.8	1044.4	2.2	6.0	6.0		
	33	UPIC	4	S/F	1044.0	1044.1	.3				
	6100	KISV	4	S/F	1136.4	1139.5U	10.5	52.0D			
	3000	POTS	45	C	1137.5	1139.6	33.0	720.0			
	2800	OTTA	3	S	1138.0	1139.8	12.0	350.0	77.0		
	9400	HUAN	4	S/F	1138.1	1139.0	2.8	80.9	38.5		10
	9500	POTS	45	C	1138.5	1139.4	42.0	53.0			
	1470	POTS	45	C	1138.5	1140.5	35.0	157.0			
	4995	SGMR	47	GB	1138.6	1139.3	12.9	219.0			QL=6 ST=2 TYP=5
	930	BORD	3	S	1138.7	1139.6	6.3	27.0	13.0		
	2695	SGMR	47	GB	1138.8	1139.6	9.8	260.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1138.8	1140.1	11.0	200.0			QL=6 ST=2 TYP=5
	9100	GORK	3	S	1139.0	1140.0	2.2	79.0			
	15400	SGMR	8	S	1139.1	1139.3	.9	38.0			QL=6 ST=2 TYP=3
	8800	SGMR	47	GB	1139.1	1139.3	2.0	61.0			QL=6 ST=2 TYP=5
	2950	GORK	3	S	1139.4	1140.6	5.5	160.0D			
	9400	HUAN	29	PBI	1140.9	1140.9	15.9	19.8	3.4		0
	9100	GORK	29	PBI	1141.2	1141.2	17.2	29.8			
	6100	KISV	29	PBI	1146.9	1148.0	3.0	10.0			
	2800	OTTA	29	PBI	1150.0	1150.0	25.0	14.6	4.0		
	2800	OTTA	20	GRF	1324.0	1328.0	21.0	14.8	7.0		
	2800	OTTA	26A	FAL	1324.0	1500.0	96.0	-5.4			
	2800	OTTA	31A	ABS	1345.0	1420.0	73.0	-8.2	-5.8		
	2800	OTTA	1	S	1439.0	1439.5	1.0	2.0	1.0		
	930	BORD	8	S	1600.9	1600.9	.1	33.0	1.0		
	2800	OTTA	21	GRF	1650.0	1740.0	120.0	8.2	4.1		
	2800	OTTA	1	S	1732.0	1735.0	7.0	4.0	1.8		
	2800	OTTA	20	GRF	1812.0	1815.0	20.0	3.4	1.7		
	2800	OTTA	1	S	2023.0	2026.0	6.5	3.4	1.8		
	200	HIRA	8	S	2142.5	2142.6	.6	1700.0	264.0		0
	100	HIRA	8	S	2142.5	2142.8	.5	690.0			ML
	3750	TYKW	20	GRF	2240.0	2255.0	40.0	2.0	1.0		
	1000	TYKW	21	GRF	2306.0	2326.0	90.0	2.0	1.0		
	1000	TYKW	45	C	2307.0	2307.4	2.0	21.0	3.0		
	1000	TYKW	29	PBI	2309.0		10.0	1.5	.7		
	100	HIRA	27	RF	2333.0	2354.0	42.0	26.0	7.0		0
	200	HIRA	27	RF	2333.6	2346.7	25.0	31.0	10.0		MR
12	200	HIRA	43	NS	0040.0	0509.0	320.0	20.0	5.0		MR
	245	LEAR	43	NS	0046.0	0051.6	10.0	24.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0559.0E	1119.0U	484.0D	24.0U			
	127	TORN	43	NS	1014.0	1154.6	286.0	40.0			V1
	245	PALE	43	NS	1936.0	0238.1	544.0D	280.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D		4.0		
	245	LEAR	43	NS	2319.0	0238.1	631.0D	160.0			QL=6 ST=2 TYP=1
	2840	PEKG	1	S	0014.0	0015.2	7.0	6.3	2.5		
	9395	PEKG	1	S	0014.0	0015.2	6.0	3.2	.7		
	245	LEAR	4	S/F	0040.1	0041.0	5.0	22.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0040.8	0041.1	.5	18.0			QL=6 ST=2 TYP=3
	2840	PEKG	21	GRF	0222.0	0226.4	13.0	4.7	4.2		
	2840	PEKG	1	S	0223.0	0223.1	1.0	2.8	.6		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	9395	PEKG	20	GRF	0223.0	0225.0	14.0	4.7	1.8		
	2000	TYKW	45	C	0302.0	0303.9	3.0D	5.0	1.5D		INTERFERENCE
	2000	TYKW	29	PBI	0308.0E		15.0D	2.0D	1.0D		INTERFERENCE
	2950	GORK	21	GRF	0331.0	0539.0	298.0	11.0			
	3750	TYKW	5	S	0350.0	0350.8	3.0U	4.0	1.5U		INTERFERENCE
	9395	PEKG	20	GRF	0350.0	0351.0	13.0	3.7	2.1		
	2840	PEKG	21	GRF	0350.0	0358.5	14.0	1.2	.5		
	2840	PEKG	1	S	0350.5	0350.9	2.5	4.0	2.1		
	2950	GORK	1	S	0351.0	0351.5	1.3	2.7			
	2000	TYKW	21	GRF	0420.0	0446.0	120.0U	3.0	1.5		
	3750	TYKW	21	GRF	0420.0	0446.0	130.0U	5.0	2.0		
	2840	PEKG	23	GRF	0420.0	0640.0	242.0D	9.5	3.2		
	2000	TYKW	5	S	0424.0	0425.4	4.0	2.5	1.0		
	3750	TYKW	5	S	0424.0	0426.0	8.0	2.0	1.0		
	2000	TYKW	20	GRF	0500.0	0503.0	30.0	3.0	1.0		
	2840	PEKG	20	GRF	0534.0	0536.3	17.0	7.8	2.4		
	2000	TYKW	5	S	0535.0	0536.2	3.0	8.0	4.0		
	3750	TYKW	5	S	0535.0	0536.3	3.0	6.0	3.0		
	2950	GORK	1	S	0535.9	0536.5	1.7	5.4			
	2000	TYKW	29	PBI	0538.0		25.0	2.0	1.0		
	3750	TYKW	29	PBI	0538.0		35.0	3.0	1.5		
	950	GORK	21	GRF	0559.8	0602.1	6.0	5.5			
	650	GORK	4	S/F	0601.9	0603.4	3.1	106.0			
	950	GORK	4	S/F	0602.9	0603.5	.8	33.0			
	950	GORK	40	F	0622.5	0718.0	87.0	37.0			
	3750	TYKW	45	C	0815.0	0816.7	4.0	13.0	4.0		
	9400	TYKW	5	S	0815.0	0816.7	3.0	17.0	7.0		
	2000	TYKW	5	S	0815.0	0816.8	3.0	4.0	2.0		
	9395	PEKG	5	S	0815.0	0816.7	9.0	15.4	7.2		
	2840	PEKG	1	S	0815.0	0816.7	3.0	6.9	2.8		
	3000	POTS	3	S	0815.0	0816.8	5.0	9.0			
	2950	GORK	2	S/F	0815.5	0816.7	2.1	8.7			
	1470	POTS	1	S	0815.5	0817.0	4.5	5.0			
	8400	BERN	3	S	0815.6	0816.6	3.0	23.0			
	11800	BERN	3	S	0815.6	0816.9	3.0	17.0			
	9100	GORK	1	S	0815.7	0816.7	1.8	155.5			
	1000	TYKW	5	S	0816.0	0816.8	2.0	3.0	1.0		
	9500	POTS	1	S	0816.0	0816.7	20.0	9.0			
	4995	LEAR	8	S	0816.1	0816.6	1.9	19.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0816.6	0816.6	1.4	18.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0818.0		10.0	1.5	.7		
	9400	TYKW	29	PBI	0818.0		10.0	4.0	2.0		
	410	LEAR	8	S	0831.8	0831.8	.2	11.0			QL=6 ST=2 TYP=3
	2950	GORK	21	GRF	0835.7	1100.0	201.0	13.0			
	2950	GORK	2	S/F	1017.8	1018.7	3.2	13.0			
	204	IZMI	5	S	1024.0	1024.0	.8	180.0	120.0		
	6100	KISV	2	S/F	1044.5	1045.7	9.0	12.0			
	610	SGMR	8	S	1245.0	1245.1	1.0	26.0			QL=6 ST=2 TYP=3
	9400	HUAN	22	GRF	1333.8	1415.4	71.8	6.0	5.5		R
	2800	OTTA	23	GRF	1620.0	1720.0	120.0	5.2	2.3		
	9400	HUAN	20	GRF	1704.5	1802.0	80.9	5.0	2.7		0
	2800	OTTA	2	S/F	1716.9	1717.0	1.2	2.4	1.2		
	2800	OTTA	20	GRF	1940.0	1948.0	35.0	3.6	2.0		
	3750	TYKW	20	GRF	2220.0	2246.0	115.0	3.0	1.5		
	2000	TYKW	20	GRF	2235.0	2300.0	120.0	2.0	1.0		
13	200	HIRA	43	NS	0050.0	0424.0	310.0	15.0	7.0		MR
	260	ONDR	44	NS	0607.0E	1347.0	483.0D				
	127	TORN	43	NS	0919.0	1037.7	221.0	10.0			V1
	245	SGMR	43	NS	1738.5	2123.1	346.5	49.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1950.0E	0227.0	500.0D	7.0	3.0		WR
	245	LEAR	43	NS	2306.0	0307.3	645.0D	74.0			QL=6 ST=2 TYP=1
	8800	PALE	47	GB	0008.1	0008.1	1.0	89.0			QL=5 ST=2 TYP=5
	1000	TYKW	5	S	0024.0	0024.3	1.0	1.5	.5		
	2000	TYKW	5	S	0053.0	0055.0	6.0	1.5	.5		
	3750	TYKW	5	S	0053.0	0055.0	4.5	2.5	1.0		
	1000	TYKW	21	GRF	0053.0	0055.0	32.0	2.0	1.0		
	2695	PENT	1	S	0053.5	0055.0	4.5	5.4	2.8		
	1000	TYKW	5	S	0105.3	0105.5	.7	2.0	.5		
	1000	TYKW	45	C	0135.0	0136.9	8.0	3.0	.7		
	3750	TYKW	20	GRF	0139.0	0150.0	50.0	4.0	2.0		

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13	2000	TYKW	20	GRF	0140.0	0150.0	40.0	2.0	1.0		
	245	PALE	47	GB	0156.0	0156.1	1.1	130.0			QL=6 ST=2 TYP=5
	2000	TYKW	21	GRF	0225.0	0250.0	70.0	3.0	1.5		
	2000	TYKW	5	S	0236.0	0236.3	1.0	3.0	1.0		
	15400	PALE	4	S/F	0239.3	0240.3	2.2	33.0			QL=5 ST=2 TYP=3
	8800	PALE	8	S	0239.3	0240.3	1.0	17.0			QL=5 ST=2 TYP=3
	3750	TYKW	20	GRF	0241.0	0254.0	55.0	2.0	1.0		
	15400	PALE	4	S/F	0305.6	0306.3	2.4	34.0			QL=5 ST=2 TYP=3
	2950	GORK	21	GRF	0327.0	0741.0	470.00	16.0			
	2000	TYKW	21	GRF	0345.0	0415.0	100.0	3.0	1.5		
	3750	TYKW	20	GRF	0350.0	0420.0	100.0	4.0	2.0		
	2000	TYKW	20	GRF	0440.0	0455.0	40.0	1.5	.7		
	9395	PEKG	20	GRF	0540.0	0600.0	52.0	8.5	3.2		
	2000	TYKW	20	GRF	0542.0	0601.0	90.0	2.0	1.0		
	3750	TYKW	20	GRF	0543.0	0550.0	60.0	3.0	1.5		
	9400	TYKW	20	GRF	0543.0	0559.0	40.0	4.0	2.0		
	410	LEAR	8	S	0543.3	0544.5	1.7	17.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0544.0	0544.1	1.1	54.0			QL=6 ST=2 TYP=5
	2840	PEKG	21	GRF	0548.0	0626.0	84.0	7.3	2.6		
	410	LEAR	8	S	0548.8	0549.8	2.0	21.0			QL=6 ST=2 TYP=3
	9395	PEKG	28	PRE	0641.0	0700.0	56.8	4.3	.8		
	2840	PEKG	1	S	0700.0	0701.1	3.0	6.5	3.2		
	2840	PEKG	1	S	0705.5	0706.4	1.5	6.2	3.1		
	2840	PEKG	28	PRE	0707.0	0734.7	30.7	6.5	3.0		
	3100	CRIM	1	S	0736.8	0737.5	4.0	29.0	10.0		
	3750	TYKW	5	S	0737.0	0738.4	4.0	45.0	14.0		
	2000	TYKW	5	S	0737.0	0738.5	5.0	29.0	10.0		
	1000	TYKW	5	S	0737.0	0738.6	5.0	12.0	5.0		
	11800	BERN	3	S	0737.5	0738.4	14.0	60.0			
	3100	BERN	3	S	0737.5	0738.4	14.0	34.0			
	9400	TYKW	5	S	0737.5	0738.4	3.5	64.0	20.0		
	5200	BERN	3	S	0737.5	0738.4	14.0	88.0			
	8400	BERN	3	S	0737.5	0738.4	14.0	94.0			
	19600	BERN	3	S	0737.5	0738.5	14.0	31.0			
	3000	POTS	3	S	0737.5	0738.5	4.0	27.0			
	1470	POTS	3	S	0737.5	0738.5	7.0	28.0			
	9500	POTS	3	S	0737.5	0738.5	3.5	44.0			
	950	GORK	45	C	0737.5	0738.6	20.7	10.6			
	950	GORK			0737.5	0746.5		6.7			
	9100	GORK	3	S	0737.7	0738.4	3.2	70.0	30.0		
	2840	PEKG	3	S	0737.7	0738.4	3.3	39.4	14.0		
	2950	GORK	3	S	0737.7	0738.5	3.4	26.0			
	4995	LEAR	47	GB	0737.8	0738.3	4.8	78.0			QL=6 ST=2 TYP=5
	6100	KISV	3	S	0737.8	0738.5	3.0	57.0			
	2695	LEAR	4	S/F	0737.8	0738.5	5.5	31.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0737.8	0738.5	3.2	69.0	32.0		
	1415	LEAR	4	S/F	0737.8	0738.6	6.2	32.0			QL=6 ST=2 TYP=3
	1415	MANI	3	S	0737.9	0739.4	5.1	46.8	15.6		
	8800	LEAR	47	GB	0738.0	0738.3	3.1	86.0			QL=6 ST=2 TYP=5
	3000	IZMI	5	S	0738.0	0738.5	1.4	35.0	18.0		
	15400	LEAR	4	S/F	0738.1	0738.5	3.2	41.0			QL=6 ST=2 TYP=3
	4995	MANI	3	S	0738.5	0739.1	2.4	78.5	26.2		
	6100	KISV	29	PBI	0740.8	0741.0	19.0	4.0			
	9400	TYKW	30	PBI	0741.0		20.0	5.0	2.5		
	3750	TYKW	30	PBI	0741.0		25.0	3.0	1.5		
	2840	PEKG	30	PBI	0741.0	0743.3	17.0	6.2	3.3		
	9395	PEKG	29	PBI	0741.0	0746.0	27.0	9.4	3.3		
	1000	TYKW	30	PBI	0742.0		20.0	3.0	1.5		
	2000	TYKW	30	PBI	0742.0		15.0	4.0	2.0		
	3750	TYKW	5	S	0745.5	0746.0	2.0	3.0	1.0		
	9400	TYKW	5	S	0745.5	0746.1	1.5	6.0	3.0		
	2000	TYKW	45	C	0745.5	0746.1	2.0	4.0	1.5		
	1000	TYKW	5	S	0745.5	0746.4	2.5	4.0	1.5		
	2840	PEKG	1	S	0745.8	0746.1	2.2	5.8	2.9		
	2950	GORK	2	S/F	0745.9	0746.1	1.5	4.0			
	6100	KISV	1	S	0745.9	0746.2	1.0	3.0			
	1470	POTS	1	S	0746.0	0746.5	1.5	5.0			
	3000	POTS	1	S	0746.0	0746.5	1.5	5.0			
	3750	TYKW	5	S	0750.0	0750.3	.7	1.5	.5		
	650	GORK	4	S/F	1118.0	1119.1	1.8	66.0			
	950	GORK	4	S/F	1118.5	1119.0	1.2	49.0			

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13	536	ONDR	8	S	1211.9	1212.1	.2	10.0			
	1470	POTS	21	GRF	1327.5	1349.5	73.0	7.0			
	2800	OTTA	21	GRF	1330.0	1335.0	50.0	6.8	3.4		
	3000	POTS	21	GRF	1330.0	1349.5	41.0	11.0			
	9500	POTS	21	GRF	1330.0	1350.0	50.0	8.0			
	1470	POTS	4	S/F	1330.8	1333.0	5.2	53.0			
	1415	SGMR	47	GB	1333.0	1333.1	.8	93.0			QL=6 ST=2 TYP=5
	930	BORD	8	S	1333.4	1333.4	.1	18.0	1.0		
	9400	HUAN	21	GRF	1333.4	1348.6	43.0	7.4	4.6		0
	9400	HUAN	4	S/F	1341.8	1343.2	2.8	33.5	12.6		R
	2800	OTTA	3	S	1342.0	1343.5	3.0	26.8	9.0		
	1470	POTS	3	S	1342.0	1343.5	5.5	27.0			
	930	BORD	3	S	1342.4	1343.7	10.6	19.0	4.0		
	3000	POTS	3	S	1342.5	1343.0	2.5	34.0			
	9500	POTS	4	S/F	1342.5	1343.1	2.5	31.0			
	8400	BERN	46	C	1342.5	1343.3	5.0	39.0			
	5200	BERN	46	C	1342.5	1343.4	5.0	31.0			
	11800	BERN	46	C	1342.5	1343.4	5.0	36.0			
	3100	BERN	4	S/F	1342.5	1343.4	5.0	29.0			
	4995	SGMR	8	S	1342.8	1343.3	1.2	38.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1342.8	1343.5	1.8	32.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1343.0	1343.3	1.0	34.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1343.3	1343.5	.7	39.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1343.3	1343.6	.8	22.0			QL=6 ST=2 TYP=3
	2800	OTTA	29	PBI	1345.0	1345.0	7.0	4.0	2.2		
	245	SGMR	47	GB	1345.3	1345.6	3.2	180.0			QL=6 ST=2 TYP=5
	234	POTS	42	SER	1345.4	1346.5	3.2	300.0	3.0		
	2650	DWIN	1	S	1347.0	1348.0	2.0	28.0	10.0		
	2800	OTTA	21	GRF	1530.0	1620.0	210.0	4.2	2.4		
	2800	OTTA	20	GRF	1535.0	1541.0	15.0	2.2	1.0		
	2800	OTTA	4	S/F	1734.0	1737.0	4.0	10.8	2.8		
	2800	OTTA	45	C	1814.0	1815.3	14.0	22.8	5.8		
	2695	PALE	4	S/F	1814.3	1815.1	2.8	29.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1818.3	1818.5	1.2	18.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1818.8	1819.6	.8	19.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	1819.5	1819.8	1.3	16.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1842.3	1842.6	1.3	90.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	1906.0	1907.0	3.0	3.2	1.6		
	245	PALE	47	GB	2145.1	2145.5	2.4	130.0			QL=5 ST=2 TYP=5
	3750	TYKW	21	GRF	2205.0	2210.0	45.0	2.0	1.0		
	2000	TYKW	20	GRF	2205.0	2213.0	45.0	3.0	1.5		
	3750	TYKW	5	S	2225.0	2230.0	20.0	1.0	.5		
	1000	TYKW	21	GRF	2257.0	2320.0	140.0	4.0	2.0		
	2000	TYKW	45	C	2258.0	2259.6	9.0	95.0	12.0		
	3750	TYKW	45	C	2258.0	2259.6	14.0	113.0	11.0		
	1000	TYKW	45	C	2258.0	2259.7	9.0	11.0	4.0		
	9400	TYKW	45	C	2258.0	2304.3	16.0	60.0	15.0		
	100	HIRA	46	C	2259.0	2259.7	3.6	2600.0	68.0		WL
	2695	PENT	45	C	2259.0	2259.8	9.0	125.0	17.2		
	610	SGMR	47	GB	2259.1	2259.1	1.5	65.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	2259.1	2259.3	1.0	130.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2259.1	2259.3	1.0	110.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	2259.1	2259.8	2.0	25.0			QL=4 ST=2 TYP=3
	2695	SGMR	47	GB	2259.3	2259.6	.5	80.0			QL=4 ST=2 TYP=5
	2695	PALE	47	GB	2259.3	2259.6	2.0	110.0			QL=6 ST=2 TYP=5
	200	HIRA	46	C	2259.3	2259.6	.8	570.0	148.0		0
	1415	PALE	8	S	2259.3	2259.6	1.7	31.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	2259.3	2259.6	1.7	70.0			QL=6 ST=2 TYP=5
	500	HIRA	27	RF	2259.4	2305.1	8.0	4.0	2.0		WR
	4995	SGMR	8	S	2259.5	2259.6	.3	30.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2259.5	2259.6	1.1	28.0			QL=6 ST=2 TYP=3
	17000	NOBE	1	S	2301.9	2305.0	7.0	46.0			R
	8800	PALE	47	GB	2302.8	2304.1	2.0	76.0			QL=6 ST=2 TYP=5
	4995	PALE	8	S	2304.0	2304.6	.8	27.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	2304.1	2304.3	.7	20.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	2304.8	2304.8	2.8	76.0			QL=6 ST=2 TYP=5
	4995	PALE	8	S	2304.8	2304.8	1.8	27.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	2307.0		6.0	1.5	.7		
	3750	TYKW	45	C	2318.0	2319.9	8.0	12.0	4.0		
	2000	TYKW	5	S	2318.0	2320.0	3.0	12.0	4.0		
	9400	TYKW	5	S	2319.0	2324.0	12.0	5.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	2695	PENT	4	S/F	2319.0	2320.0	6.5	14.2	4.8		
	2000	TYKW	29	PBI	2321.0		6.0	2.0	1.0		
	3750	TYKW	29	PBI	2326.0		5.0	1.0	.5		
	2000	TYKW	5	S	2342.0	2343.0U	6.0	4.0D	1.5D		
	3750	TYKW	5	S	2342.0	2343.0U	15.0	3.0D	1.0D		
	2695	PENT	20	GRF	2342.0	0025.0	120.0	4.6	2.3		
14	410	LEAR	43	NS	0138.8	0240.8	325.8	36.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1810.0	0241.8	634.0D	430.0			QL=6 ST=2 TYP=1
	2000	TYKW	5	S	0012.0	0014.0	90.0	3.0	1.0		
	3750	TYKW	21	GRF	0012.0	0034.0	94.0	3.0	1.5		
	3750	TYKW	45	C	0013.0	0020.0	16.0	3.0	1.5		
	2840	PEKG	20	GRF	0014.0	0024.4	15.0	6.5	3.2		
	1000	TYKW	45	C	0034.0	0036.2	4.0	1.5	.5		
	2840	PEKG	1	S	0040.7	0048.1	8.0	6.1	2.9		
	3750	TYKW	5	S	0046.5	0048.0	4.0	3.0	1.0		
	3750	TYKW	5	S	0135.0	0135.2	1.5	2.0	.5		
	245	LEAR	47	GB	0135.6	0135.6	1.0	78.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0137.1	0137.6	.7	17.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	0210.1	0210.3	1.2	24.0			QL=6 ST=2 TYP=3
	2000	TYKW	28	PRE	0236.0	0238.5	4.7	8.0	2.0		
	3750	TYKW	45	C	0237.0	0242.6	15.0	130.0	19.0		
	2840	PEKG	4	S/F	0237.0	0242.5	15.0	134.0	52.0		
	9400	TYKW	45	C	0238.0	0242.7	8.0	46.0	11.0		
	9395	PEKG	4	S/F	0239.0	0242.6	16.0	78.7	31.1		
	500	HIRA	3	S	0240.3	0243.4	24.0	12.0	4.0		0
	410	PALE	47	GB	0240.6	0243.3	7.9	160.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0240.7	0242.7	14.3	103.0	24.0		
	1000	TYKW	5	S	0240.7	0243.1	16.3	61.0	22.0		
	4995	PALE	47	GB	0241.1	0242.5	3.7	110.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	0241.1	0242.6	6.0	100.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0241.6	0242.8	6.9	91.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0242.3	0242.3	1.5	390.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	0242.3	0242.5	2.0	43.0			QL=6 ST=2 TYP=3
	610	PALE	4	S/F	0242.3	0243.1	6.2	29.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	0242.3	0243.3	1.8	41.0			QL=6 ST=2 TYP=3
	200	HIRA	46	C	0242.4	0242.6	1.0	515.0	94.0		0
	9400	TYKW	29	PBI	0246.0		40.0	8.0	2.5		
	35000	NAGO	5	S	0247.0	0247.0	3.0	9.0			
	4995	MANI	3	S	0250.0	0252.0	4.0	86.5	28.8		
	1415	MANI	3	S	0250.1	0252.0	6.8	79.2	26.4		
	3750	TYKW	30	PBI	0252.0		85.0	6.0	2.0		
	2000	TYKW	29	PBI	0255.0		40.0	6.0	2.0		
	1000	TYKW	29	PBI	0257.0		40.0	6.0	1.5		
	410	PALE	4	S/F	0302.1	0302.6	6.0	46.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0307.1	0307.3	1.2	98.0			QL=6 ST=2 TYP=5
	2950	GORK	21	GRF	0326.0	0516.7	301.0	18.0			
	200	HIRA	42	SER	0349.0	0402.7	31.0	120.0			MR
	2000	TYKW	45	C	0355.0	0400.7	12.0	10.0	4.0		
	1000	TYKW	45	C	0355.0	0400.7	9.0	4.5	1.5		
	3750	TYKW	45	C	0356.0	0400.7	17.0	8.0	3.0		
	2840	PEKG	41	F	0357.0	0358.5	8.0	8.6	2.8		
	2950	GORK	1	S	0357.8	0358.0	1.0	3.9			
	245	PALE	8	S	0358.8	0358.8	1.0	46.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0400.0	0402.5	13.0	7.0	3.0		
	2950	GORK	1	S	0400.2	0400.7	1.3	5.9			
	2695	LEAR	4	S/F	0400.5	0400.8	5.5	10.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0400.5	0401.0	.6	17.0			QL=6 ST=3 TYP=3
	1415	LEAR	4	S/F	0400.6	0400.8	5.0	11.0			QL=6 ST=2 TYP=3
	9395	PEKG	1	S	0401.0	0403.6	8.0	6.0	3.1		
	8800	LEAR	4	S/F	0402.0	0402.6	6.6	13.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0402.0	0402.6	5.8	10.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0404.0		20.0	1.5	.7		
	2000	TYKW	29	PBI	0407.0		12.0	3.0	1.5		
	3750	TYKW	28	PRE	0425.0	0500.0	41.0	4.0	2.5		
	2000	TYKW	28	PRE	0425.0	0500.0	41.0	3.0	1.5		
	9100	GORK	21	GRF	0443.0		53.0				
	1000	TYKW	45	C	0459.0	0459.4	2.0	14.0	2.0		
	950	GORK	21	GRF	0503.0	0524.0	46.0	14.0			
	200	HIRA	46	C	0505.8	0507.0	22.7	6200.0	82.0		0
	3750	TYKW	47	GB	0506.0	0507.5	15.0	1220.0	100.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	2000	TYKW	47	GB	0506.0	0507.6	14.0	670.0	95.0		
	100	HIRA	48	C	0506.0	0507.2	15.7	9400.0	440.0		WL
	6100	KISV	3	S	0506.0	0507.3U	3.0	280.0D			
	9395	PEKG	47	GB	0506.0	0507.6	13.0	1609.0			
	100	HIRA			0506.0	0510.4		120.0			ML
	2950	GORK	3	S	0506.2	0507.6	10.2	903.0			
	500	HIRA	3	S	0506.3	0507.8	28.0	155.0	40.0		WL
	650	GORK	3	S	0506.4	0507.7	9.3	193.0			
	245	LEAR	49	GB	0506.5	0507.3	4.1	7100.0			QL=6 ST=3 TYP=7
	9100	GORK	3	S	0506.5	0507.4	1.5	1900.0			
	9400	TYKW	47	GB	0506.5	0507.5	7.5	1680.0	110.0		
	1000	TYKW	47	GB	0506.5	0507.7	18.5	504.0	100.0		
	950	GORK	5	S	0506.5	0507.7	16.8	410.0			
	29	UPIC	48	C	0506.5	0508.0	10.4				
	33	UPIC	48	C	0506.5	0508.0	23.5				
	5200	BERN	47	GB	0506.6	0507.4	12.0	1287.0			
	19600	BERN	4	S/F	0506.6	0507.5	12.0	431.0			
	8400	BERN	47	GB	0506.6	0507.5	12.0	1927.0			
	4995	LEAR	49	GB	0506.6	0507.5	8.5	1600.0			QL=6 ST=3 TYP=7
	8800	LEAR	49	GB	0506.6	0507.5	10.0	2000.0			QL=6 ST=3 TYP=7
	11800	BERN	47	GB	0506.6	0507.5	12.0	1337.0			
	2695	LEAR	49	GB	0506.6	0507.6	14.9	880.0			QL=6 ST=3 TYP=7
	1415	LEAR	49	GB	0506.6	0507.6	18.4	620.0			QL=6 ST=3 TYP=7
	3100	BERN	47	GB	0506.6	0507.6	12.0	1022.0			
	17000	NOBE	21	GRF	0506.6	0511.0	8.0	45.0			R
	15400	LEAR	49	GB	0506.8	0507.5	10.3	900.0			QL=6 ST=3 TYP=7
	610	LEAR	49	GB	0506.8	0507.6	18.2	310.0			QL=6 ST=3 TYP=7
	4995	MANI	47	GB	0506.8	0507.7	11.2	1297.8	432.6		
	1415	MANI	47	GB	0506.8	0507.9	14.2	720.7	240.2		
	35000	NAGO	45	C	0507.0	0507.0	8.0	26.0			
	17000	NOBE	3	S	0507.0	0507.5	1.5	715.0			R
	606	MANI	3	S	0507.0	0507.9	11.0	357.4	119.1		
	410	LEAR	49	GB	0507.1	0508.3	17.9	100.0			QL=6 ST=3 TYP=7
	6100	KISV	29	PBI	0509.0	0509.0	40.0	35.0			
	6100	KISV	4	S/F	0509.3	0510.3	4.0	23.0			
	9400	TYKW	29	PBI	0514.0		10.0	14.0	5.0		
	650	GORK	29	PBI	0515.7	0515.9	72.5	26.0			
	2000	TYKW	29	PBI	0520.0		65.0	13.0	3.0		
	3750	TYKW	30	PBI	0521.0		70.0	8.0	2.0		
	1000	TYKW	29	PBI	0525.0		80.0	13.0	3.5		
	3750	TYKW	45	C	0557.0	0559.2	3.0D	5.0	3.0D		
	6100	KISV	2	S/F	0557.0	0559.0	8.0	5.0			
	3750	TYKW	29	PBI	0603.0E		17.0D	3.0D	1.5D		
	260	ONDR	42	SER	0613.0	0633.8	23.8	7.0			
	6100	KISV	1	S	0644.1	0644.2	.1	5.0			
	3750	TYKW	20	GRF	0700.0	0715.0	80.0	3.0	1.5		
	2000	TYKW	5	S	0706.0	0707.4	13.0	4.0	1.5		
	1000	TYKW	45	C	0814.7	0815.5	1.0	6.0	1.5		
	2950	GORK	20	GRF	0835.8	0943.4	75.0D	5.9			
	6100	KISV	2	S/F	0903.0	0903.5	1.5	5.0			
	260	ONDR	42	SER	1211.8	1218.3	17.4	25.0			
	6100	KISV	2	S/F	1236.2	1236.9	3.0	6.0			
	2800	OTTA	20	GRF	1310.0	1350.0	90.0	7.4	3.8		
	260	ONDR	8	S	1352.6	1352.7	.2	5.0			
	260	ONDR	8	S	1409.2	1409.2	.1	6.0			
	9400	HUAN	1	S	1611.7	1612.4	5.6	6.6	3.8		R
	1000	TYKW	20	GRF	2230.0	2320.0	240.0	4.0	2.0		
	2000	TYKW	21	GRF	2240.0	2310.0	100.0	3.0	1.5		
	3750	TYKW	21	GRF	2240.0	2313.0	120.0	3.0	1.5		RAIN
	2695	PENT	21	GRF	2240.0	2343.0	120.0	6.6	3.0		
	2000	TYKW	5	S	2337.5	2338.7	4.0	8.0	2.0		
	3750	TYKW	45	C	2338.0	2338.7	8.0	13.0	2.5		
	2695	PENT	3	S	2338.0	2338.7	1.0	12.6	6.0		
	2695	LEAR	8	S	2338.5	2338.6	1.0	17.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2357.0	2359.0	8.0	2.0	1.0D		
	2000	TYKW	5	S	2358.0	2359.0	5.0	2.5	1.0		
	2695	PENT	1	S	2358.0	2359.5	3.0	4.0	1.8		
15	410	LEAR	43	NS	0140.1	0204.1	45.9	13.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	0317.0	0836.0	394.0D	35.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	0437.5	0636.3	313.5D	53.0			QL=6 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	260	ONDR	44	NS	0544.0E	0949.0	523.0D	8.0U			
	33	UPIC	43	NS	0559.3		720.7D				
	29	UPIC	43	NS	0559.5		720.5D				
	245	SGMR	43	NS	1607.3	1904.1	435.7D	130.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1709.5	0156.6	690.5D	250.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1952.0E	0334.0	810.0D	28.0	12.0		WR
	208	VORO	44	NS	2200.0E		300.0D		8.0		
	245	LEAR	43	NS	2305.0	0156.6	646.0D	180.0			QL=6 ST=2 TYP=1
P=7	3750	TYKW	5	S	0031.0	0031.6	5.0	4.0	1.5		
	3750	TYKW	20	GRF	0103.0	0126.0	60.0	3.0	1.5		
	2000	TYKW	5	S	0104.0	0104.4	4.0	1.5	.5		
	3750	TYKW	5	S	0104.0	0104.4	4.0	1.5	.5		
	3750	TYKW	20	GRF	0245.0	0300.0U	35.0	3.0D	1.5D		
	245	LEAR	4	S/F	0252.0	0255.1	3.1	47.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0256.0	0257.2	3.5	4.0	1.0		
	2000	TYKW	5	S	0256.3	0256.7	3.5	3.0	.7		
	9400	TYKW	20	GRF	0257.0	0301.0	70.0U	4.0	2.0U		RAIN
	245	LEAR	8	S	0258.3	0259.1	1.3	22.0			QL=6 ST=2 TYP=3
P=7	410	LEAR	8	S	0259.0	0259.1	1.0	18.0			QL=6 ST=2 TYP=3
P=7	245	LEAR	8	S	0315.8	0316.0	.3	11.0			QL=6 ST=2 TYP=3
	500	HIRA	22	GRF	0321.0	0344.9	74.0	6.0	3.0		SR
P=7	200	HIRA	27	RF	0815.0	0838.0	46.0	7.0	3.0		WR
P=7	100	HIRA	46	C	0849.3	0855.8	26.0	1400.0	90.0		ML
	113	POTS	4	S/F	0854.1	0854.2	16.2	230.0	30.0		III
P=7	2800	OTTA	20	GRF	1348.0	1352.0	20.0	2.4			
P=7	2800	OTTA	20	GRF	1520.0	1540.0	70.0	3.4	1.7		
	2800	OTTA	1	S	1751.0	1752.0	2.0	2.6	1.3		
	245	PALE	47	GB	1807.6	1808.0	1.7	100.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1856.8	1857.1	1.5	90.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1903.5	1903.8	3.6	139.0			QL=6 ST=2 TYP=5
	245	PALE	8	S	1908.1	1908.3	1.2	47.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1913.3	1914.0	1.7	77.0			QL=6 ST=2 TYP=5
P=7	245	PALE	47	GB	2036.6	2037.0	1.4	54.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2039.8	2042.0	12.8	88.0			QL=6 ST=2 TYP=5
	3750	TYKW	21	GRF	2230.0	2250.0	200.0	4.0	2.0		RAIN
	2695	PENT	1	S	2253.0	2255.0	5.0	2.2	1.1		
	3750	TYKW	5	S	2254.0	2254.3	4.0	5.0	1.5		
16	260	ONDR	44	NS	0555.0E	0910.0U	493.0D	67.0U			
	204	IZMI	43	NS	0600.0		360.0	48.0			
	29	UPIC	44	NS	0800.0E		424.7D				
	33	UPIC	43	NS	0800.4		424.6				
	410	SGMR	43	NS	1013.0	1157.3	790.0D	73.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1013.0	2011.0	790.0D	46.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1656.0	0248.5	702.0D	260.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1656.0	0342.6	702.0D	200.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1955.0E	2035.0U	185.0D	40.0	10.0		WR
	208	VORO	44	NS	2200.0E		300.0D		3.0		
	410	LEAR	44	NS	2304.0E	0001.1	399.6D	35.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2304.0	0248.6	648.0D	230.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0003.0	0009.0	30.0	2.0	1.0		
	3750	TYKW	5	S	0050.0	0053.0	20.0	3.0	1.5		
	410	LEAR	8	S	0110.1	0110.1	.7	20.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0203.0	0204.1	3.0	31.0	8.0		
	9400	TYKW	45	C	0203.0	0204.6	6.0	46.0	13.0		
	2000	TYKW	45	C	0203.0	0204.7	8.0	15.0	4.0		
	2840	PEKG			0203.0	0204.1		36.5	10.5		
	9395	PEKG	45	C	0203.0	0204.5	13.0	42.0	19.2		
	2840	PEKG			0203.0	0204.7	8.0	19.7	8.4		
	2695	LEAR	4	S/F	0203.6	0204.1	2.2	27.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	0204.0	0204.1	1.1	23.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	0204.0	0204.1	1.6	36.0			QL=6 ST=2 TYP=3
	8800	PALE	4	S/F	0204.0	0204.5	3.8	50.0			QL=6 ST=2 TYP=3
P=3	15400	LEAR	4	S/F	0204.0	0204.8	4.6	40.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0204.1	0204.1	1.5	29.0			QL=6 ST=2 TYP=3
	8800	LEAR	47	GB	0204.1	0204.6	4.2	52.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0204.1	0204.6	5.0	29.0			0
	3750	TYKW	30	PBI	0206.0		60.0	3.0	1.5		
P=1	3750	TYKW	5	S	0206.0	0206.8	1.5	2.0	.7		
P=1	9400	TYKW	29	PBI	0209.0		20.0	5.0	2.0		
P=1	2000	TYKW	5	S	0238.0	0245.0	25.0	1.5	.7		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	2000	TYKW	20	GRF	0310.0	0340.0	230.0	4.0	2.0		
	3750	TYKW	21	GRF	0311.0	0339.0	145.0	8.0	3.5		RAIN
	100	HIRA	42	SER	0314.3	0316.4	5.6	430.0			WL
	3750	TYKW	21	GRF	0441.0	0458.0	35.0	4.0	2.0		
	3750	TYKW	5	S	0447.0	0448.0	5.0	5.0	1.5		
	410	LEAR	8	S	0512.5	0512.5	.1	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0533.5	0533.5	.5	20.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0741.8	0741.8	.2	18.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0909.8	0910.1	.5	93.0			QL=6 ST=3 TYP=5
	410	LEAR	8	S	0910.0	0910.1	.1	10.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	1037.8	1037.8	.1	29.0			
	536	ONDR	8	S	1240.0	1240.0	.1	6.0			
	2800	OTTA	20	GRF	1915.0	1918.0	17.0	3.0	1.5		
	8800	SGMR	49	GB	2016.6	2017.1	1.5	1100.0			QL=6 ST=3 TYP=6
	2800	OTTA	21	GRF	2115.0	2140.0	90.0	4.0	1.8		
	3750	TYKW	20	GRF	2130.0	2154.0	90.0	4.0	2.0		
	2000	TYKW	20	GRF	2130.0	2155.0	90.0	2.0	1.0		
	2800	OTTA	20	GRF	2150.0	2151.5	15.0	3.4	1.7		
	500	HIRA	22	GRF	2300.0	0133.6	240.0	10.0	5.0		SR
	1000	TYKW	21	GRF	2310.0	2340.0	120.0	3.0	1.5		
	100	HIRA	46	C	2351.0E	2353.3	12.0D	640.0	170.0		WL
	200	HIRA	41	F	2352.6	2353.8	2.7	260.0			ML
17	260	ONDR	44	NS	0555.0E	1117.0U	487.0D	19.0			
	410	SGMR	43	NS	1014.0	1421.0	696.0D	74.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1655.0	0140.6	700.0D	63.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1655.0	1853.1	700.0D	200.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		270.0D		6.0		
	410	LEAR	43	NS	2303.0	0135.6	649.0D	82.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2303.0	0157.8	649.0D	130.0			QL=6 ST=2 TYP=1
	3750	TYKW	21	GRF	0010.0	0040.0	60.0	2.0	1.0		
	500	HIRA	8	S	0023.4	0023.4	.6	500.0			WR
	2000	TYKW	5	S	0023.5	0023.9	1.5	5.0	1.0		
	610	PALE	47	GB	0023.6	0023.6	1.2	290.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	0023.6	0023.8	1.0	30.0	4.0		
	610	LEAR	47	GB	0023.6	0023.8	1.2	300.0			QL=6 ST=2 TYP=5
	1415	PALE	8	S	0023.6	0023.8	1.4	26.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0023.8	0024.0	1.2	24.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0040.0	0040.5	2.0	5.0	.5		
	2840	PEKG	45	C	0057.0	0058.8	10.0	24.0	10.2		
	9395	PEKG	3	S	0058.0	0058.9	2.0	17.1	9.2		
	410	LEAR	47	GB	0058.1	0058.1	.7	63.0			QL=6 ST=2 TYP=5
	500	HIRA	8	S	0058.3	0058.5	.6	450.0			
	9400	TYKW	5	S	0058.4	0058.8	1.0	10.0	4.0		
	610	PALE	49	GB	0058.5	0058.6	1.3	1399.0			QL=6 ST=2 TYP=6
	8800	PALE	8	S	0058.5	0058.8	1.0	16.0			QL=6 ST=3 TYP=3
	2000	TYKW	5	S	0058.5	0058.8	1.5	52.0	14.0		
	4995	PALE	8	S	0058.5	0058.8	1.0	11.0			QL=6 ST=3 TYP=3
	3750	TYKW	5	S	0058.5	0058.9	1.5	12.0	5.0		
	610	LEAR	49	GB	0058.6	0058.6	1.4	1800.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	0058.6	0058.8	1.4	93.0	18.0		
	2695	LEAR	8	S	0058.6	0058.8	1.2	27.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	0058.6	0058.8	1.2	20.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0058.6	0058.8	1.0	13.0			QL=6 ST=2 TYP=3
	1415	LEAR	47	GB	0058.6	0058.8	1.4	79.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0058.6	0058.8	1.2	84.0			QL=6 ST=2 TYP=5
	2695	PENT	3	S	0058.7	0058.9	1.3	28.0	9.4		
	8800	LEAR	8	S	0058.8	0058.8	1.0	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0100.0		8.0	2.0	1.0		
	2000	TYKW	29	PBI	0100.0		5.0	2.0	1.0		
	1000	TYKW	5	S	0123.0	0126.0	25.0	2.0	.7		
	3750	TYKW	21	GRF	0230.0	0312.0	115.0	2.0	1.0		
	950	GORK	4	S/F	0346.1	0346.9	3.0	23.0			
	410	PALE	47	GB	0346.5	0346.6	1.0	169.0			QL=6 ST=2 TYP=5
	610	PALE	49	GB	0346.5	0346.6	1.1	1000.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	0346.5	0346.8	1.5	23.0	5.0		
	410	LEAR	47	GB	0346.6	0346.8	.7	210.0			QL=5 ST=2 TYP=5
	610	LEAR	49	GB	0346.6	0346.8	1.0	1300.0			QL=5 ST=2 TYP=6
	1415	PALE	8	S	0346.6	0347.0	.9	18.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0346.7	0347.1	1.3	8.0	1.5		
	1415	LEAR	8	S	0346.8	0347.1	.5	18.0			QL=5 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	3750	TYKW	5	S	0358.0	0359.6	12.0	4.0	1.5		
	9400	TYKW	20	GRF	0500.0	0610.0	200.0	10.0	5.0		
	2000	TYKW	20	GRF	0500.0	0610.0	180.0	2.0	1.0		
	3750	TYKW	20	GRF	0500.0	0618.0	180.0	3.0	1.5		
	950	GORK	4	S/F	0537.3	0537.8	4.2	51.0			
	245	LEAR	8	S	0740.3	0740.5	.3	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0740.5	0740.5	.1	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0805.5	0805.5	.1	13.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0805.5	0805.6	.3	9.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0832.1	0832.1	.2	38.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0832.1	0833.1	1.2	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0856.5	0856.6	1.0	23.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0901.3	0901.3	.7	28.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0907.5	0907.8	.8	32.0			
	410	LEAR	8	S	0928.3	0928.3	.2	39.0			QL=5 ST=2 TYP=3
	930	BORD	8	S	0957.1	0957.1	.1	17.0	1.0		
	536	ONDR	40	F	1034.8	1036.7	2.3	27.0			
	930	BORD	46	C	1035.0	1035.4	1.6	32.0	4.0		
	950	GORK	2	S/F	1106.2	1107.0	1.9	12.6			
	650	GORK	4	S/F	1106.4	1106.9	1.0	33.0			
	536	ONDR	40	F	1241.3	1246.4	15.0	10.0			
	9400	HUAN	22	GRF	1335.9	1344.0	24.0	4.2	2.3		0
	9400	HUAN	21	GRF	1416.7	1448.0	99.7	3.4	2.4		0
	2800	OTTA	45	C	1516.0	1517.7	6.5	17.0	4.2		
	3100	BERN	4	S/F	1516.1	1517.5	6.0	18.0			ONLY PAPER REC
	29	UPIC	42	SER	1516.2	1517.5	24.6				
	9400	HUAN	1	S	1516.4	1517.5	2.2	5.0	3.4		0
	33	UPIC	48	C	1516.6	1517.5	8.4				
	245	SGMR	47	GB	1516.8	1517.1	.8	92.0			QL=6 ST=2 TYP=5
	127	TORN	47	GB	1516.8	1521.4	8.0	750.0D			
	2650	DWIN	1	S	1517.0	1517.0	1.0	20.0	10.0		
	1415	SGMR	47	GB	1517.0	1518.0	3.6	30.0			QL=6 ST=2 TYP=5
	930	BORD	46	C	1517.0	1520.4	4.4	173.0	6.0		
	610	SGMR	8	S	1517.5	1518.0	.5	19.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1520.1	1520.5	.4	100.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	1600.0	1622.0	60.0	2.6	1.2		
	9400	HUAN	20	GRF	1604.1	1625.0	42.0	3.4	1.7		0
	33	UPIC	46	C	1632.1	1635.0	4.5				
	9400	HUAN	4	S/F	1743.6	1747.5	5.2	21.9	4.0		0
	2800	OTTA	45	C	1743.7	1744.9	5.3	30.0	7.7		
	4995	PALE	8	S	1744.1	1744.8	2.0	29.0			QL=6 ST=2 TYP=3
	2695	PALE	4	S/F	1744.1	1744.8	2.2	37.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1744.1	1745.0	1.2	130.0			QL=5 ST=3 TYP=5
	4995	SGMR	8	S	1744.3	1744.8	.8	24.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1744.3	1744.8	1.0	16.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	1744.6	1744.8	1.0	13.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1744.6	1744.8	.2	18.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	1744.8	1745.0	.3	130.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	1745.1	1745.1	.2	37.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1747.0	1747.6	1.0	50.0	10.0		
	8800	PALE	47	GB	1747.3	1747.6	1.5	58.0			QL=6 ST=2 TYP=5
	1415	PALE	8	S	1747.3	1747.6	1.5	50.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1747.3	1747.6	.7	42.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1747.3	1747.8	.8	260.0			QL=5 ST=3 TYP=5
	4995	PALE	47	GB	1747.3	1747.8	1.7	52.0			QL=6 ST=2 TYP=5
	2695	PALE	8	S	1747.5	1747.8	1.3	28.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1747.5	1747.8	.6	46.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1747.5	1747.8	.5	46.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	1747.6	1747.8	.4	210.0			QL=6 ST=2 TYP=5
	2800	OTTA	29	PBI	1749.0	1749.0	95.0	3.4			
	9400	HUAN	20	GRF	1821.5	1858.5U	112.0	8.4	3.7		0
	9400	HUAN	2	S/F	2031.3	2032.0	4.2	10.1	4.5		0
	9400	TYKW	20	GRF	2150.0U	2230.0U	140.0U	20.0U	10.0U		RAIN
	3750	TYKW	20	GRF	2151.0	2220.0	60.0	4.0	2.0		
	2800	OTTA	1	S	2153.0	2153.5	1.5	2.8	1.4		
	3750	TYKW	21	GRF	2310.0	0045.0	190.0	4.0	2.0		
18	200	HIRA	43	NS	0125.0	0140.0	133.0	10.0	5.0		WR
	260	ONDR	44	NS	0541.0E	0818.0U	514.0D	91.0U			
	245	SGMR	43	NS	1015.0	2036.8	783.0	100.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1650.0	0232.8	705.0D	73.0			QL=6 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	245	PALE	43	NS	1650.0	0246.8	705.0D	130.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		80.0D		4.0		
	3750	TYKW	20	GRF	0000.0	0100.0	150.0	3.0	1.5		
	500	HIRA	22	GRF	0000.0	0144.1	240.0	20.0	8.0		SR
	2695	PENT	20	GRF	0010.0	0110.0	90.0	5.2	2.6		
	1000	TYKW	20	GRF	0023.0	0034.0	30.0	3.0	1.5		
	9400	TYKW	21	GRF	0055.0U	0106.0U	85.0U	10.0U	4.0U		RAIN
	3750	TYKW	45	C	0056.5	0057.4	5.0	8.0	2.0		
	1000	TYKW	45	C	0100.0	0139.4	90.0	13.0	5.0		
	3750	TYKW	20	GRF	0102.0	0106.5	40.0	4.0	1.5		
	9400	TYKW	45	C	0120.0	0121.0	3.0U	6.0U	3.0U		
	610	LEAR	8	S	0123.1	0123.5	.5	19.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0137.3	0139.0	4.0	20.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0138.0	0138.1	1.1	73.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0138.8	0139.1	2.0	60.0			QL=6 ST=2 TYP=5
	610	LEAR	4	S/F	0144.0	0145.5	3.5	17.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0145.6	0145.6	1.0	31.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0146.3	0146.5	6.0	58.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0155.6	0156.0	.7	92.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0155.8	0156.0	.3	42.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	0157.5	0157.6	1.3	210.0			QL=5 ST=2 TYP=5
	410	LEAR	8	S	0211.6	0211.8	1.0	30.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0213.3	0213.3	1.0	130.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0233.8	0234.1	1.3	119.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0233.8	0234.1	1.3	210.0			QL=5 ST=2 TYP=5
	610	LEAR	8	S	0300.8	0301.0	.2	13.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0307.3	0307.3	.3	19.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0307.5	0307.5	.1	24.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0318.3	0318.6	2.0	60.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0318.5	0318.5	1.3	6.0			QL=6 ST=2 TYP=3
	2000	TYKW	21	GRF	0320.0	0500.0	240.0	2.0	1.0		
	1000	TYKW	21	GRF	0322.0	0339.0	35.0	2.0	1.0		
	3750	TYKW	21	GRF	0330.0	0519.0	220.0	4.0	2.0		
	9400	TYKW	20	GRF	0338.0	0429.0	135.0	8.0	4.5U		RAIN
	950	GORK	21	GRF	0345.0E		6.8D				
	500	HIRA	46	C	0346.9	0347.6	1.0	140.0	30.0		WR
	1000	TYKW	45	C	0347.0	0347.4	3.0	12.0	2.0		
	2000	TYKW	45	C	0347.0	0348.9	3.0	4.0	1.0		
	200	HIRA	42	SER	0347.0	0348.7	12.3	420.0			WR
	100	HIRA	46	C	0347.0	0349.0	4.0	2000.0	220.0		ML
	245	LEAR	47	GB	0347.1	0347.5	.7	84.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0347.1	0348.0	.9	80.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0347.3	0347.3	1.0	65.0			QL=6 ST=2 TYP=5
	950	GORK	4	S/F	0347.3	0347.6	2.6	37.0			
	1415	LEAR	8	S	0347.5	0347.6	.5	16.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0403.0	0403.6	2.0	4.0	1.5		
	4995	LEAR	8	S	0403.0	0403.3	1.1	11.0			QL=6 ST=2 TYP=3
	8800	LEAR	49	GB	0403.1	0403.3	.9	6.0			QL=6 ST=2 TYP=6
	950	GORK	2	S/F	0625.1	0626.4	4.0	7.0			
	200	HIRA	41	F	0646.0	0714.0	36.0	60.0			MR
	536	ONDR	41	F	0750.3	0754.3	14.2	6.0			
	234	POTS	42	SER	0842.8	0845.5	3.1	275.0	3.0		
	536	ONDR	42	SER	0926.9	0937.3	17.1	24.0			
	6100	KISV	1	S	0951.2	0952.8	8.0	3.0			
	0930	BORD	8	S	0955.3	0955.3	.3	19.0	2.0		
	536	ONDR	41	F	1111.9	1116.4	11.8	15.0			
	6100	KISV	2	S/F	1115.1	1117.2	4.0	13.0			
	3000	POTS	4	S/F	1116.0	1117.2	2.5	21.0			
	3100	BERN	4	S/F	1116.2	1116.9	4.0	26.0			ONLY PAPER REC
	2800	OTTA	3	S	1116.2	1117.1	2.0	19.0	7.8		
	1470	POTS	3	S	1116.3	1117.1	2.7	8.0			
	2950	GORK	3	S	1116.4	1117.1	3.8	20.0			
	8400	BERN	4	S/F	1116.4	1117.2	3.0	20.0			
	4995	ATHN	8	S	1116.5	1117.1	1.6	25.0			QL=6 ST=2 TYP=3
	8800	ATHN	8	S	1116.5	1117.1	1.8	13.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	1116.5	1117.1	1.5	18.0	9.0		
	2695	ATHN	8	S	1116.6	1117.1	1.7	17.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	1116.7	1117.3	1.3	17.0			
	950	GORK	20	GRF	1116.7	1117.5	43.0D	7.2			
	1415	ATHN	8	S	1116.8	1117.1	1.5	8.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1116.8	1117.3	.8	40.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	3000	IZMI	5	S	1116.8	1117.5	2.0	23.0	18.0		
	2695	SGMR	8	S	1117.1	1117.5	1.2	42.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1117.1	1117.6	.7	33.0			QL=6 ST=2 TYP=3
	650	GORK	29	PBI	1118.0	1118.1	42.0D	3.0			
	1470	POTS	3	S	1207.0	1207.5	1.0	8.0			
	930	BORD	8	S	1207.2	1207.4	.8	317.0	1.0		
	536	ONDR	41	F	1241.0	1241.8	6.6	15.0			
	536	ONDR	8	S	1323.0	1323.7	.7U	23.0			
	2800	OTTA	8	S	1326.2	1326.4	.8	2.8	1.4		
	2800	OTTA	27A	RF	1340.0		370.0	3.0	2.8		
	2800	OTTA	24	R	1340.0	1420.0	40.0	3.0	1.5		
	930	BORD	8	S	1403.7	1403.7	.1	29.0	1.0		
	2800	OTTA	24P	R	1420.0		310.0	.3			
	2800	OTTA	20	GRF	1630.0	1710.0	70.0	3.2	1.6		
	410	SGMR	8	S	1729.6	1730.1	.5	23.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	1814.2	1820.2	26.6	5.1	2.1		0
	2650	DWIN	2	S/F	1816.0	1817.0	1.0	20.0	10.0		
	2800	OTTA	26	FAL	1930.0	1950.0	20.0	-2.0	-1.0		
	2800	OTTA	22	GRF	2010.0	2230.0	220.0	5.8	2.9		
	610	SGMR	8	S	2039.1	2039.3	.4	33.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2145.0	2211.6	35.0	7.0	2.5		
	3750	TYKW	20	GRF	2155.0	2225.0	45.0	2.0	1.0		
	2000	TYKW	20	GRF	2200.0	2225.0	100.0	2.0	1.0		
	1000	TYKW	29	PBI	2220.0		90.0	3.0	1.5		
19	200	HIRA	43	NS	0310.0	0437.0	155.0	10.0	4.0		WR
	127	TORN	43	NS	1012.0	1059.6	288.0	10.0			VO
	245	SGMR	43	NS	1016.0	1104.1	781.0	119.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	1016.0	1538.3	781.0	51.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1653.1	0251.6	696.9D	100.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1653.1	1953.1	696.9D	180.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	2045.0	0506.0	755.0D	24.0	10.0		MR
	208	VORO	44	NS	2200.0E		300.0D		4.0		
	410	LEAR	43	NS	2302.0	0240.0	651.0D	59.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2302.0	0440.5	651.0D	320.0			QL=6 ST=2 TYP=1
	3750	TYKW	5	S	0005.0	0005.3	2.0	1.5	.5		
	3750	TYKW	21	GRF	0005.0	0030.0	75.0	2.0	1.0		
	410	LEAR	8	S	0024.0	0024.0	.3	10.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0024.1	0024.1	.2	13.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0028.0	0028.6	1.0	39.1	15.0		
	2000	TYKW	45	C	0047.0	0047.9	3.0	8.0	1.5		
	9400	TYKW	45	C	0047.0	0048.0	2.0	15.0	3.0		
	3750	TYKW	45	C	0047.7	0048.0	1.3	5.0	1.5		
	1415	LEAR	47	GB	0047.8	0047.8	1.2	130.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0047.8	0047.8	1.0	40.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0047.8	0048.1	1.0	36.0	10.0		
	4995	LEAR	8	S	0048.0	0048.0	.8	7.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0048.0	0048.0	.8	17.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0048.0	0048.0	.8	5.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0105.3	0105.8	2.0	1.5	.5		
	200	HIRA	46	C	0110.5	0111.3	1.7	115.0	24.0		MR
	1000	TYKW	45	C	0119.3	0119.6	1.5	4.0	1.0		
	410	PALE	47	GB	0234.0	0234.1	1.1	53.0			QL=6 ST=2 TYP=5
	500	HIRA	22	GRF	0301.0	0432.0	180.0	16.0	6.0		MR
	610	PALE	47	GB	0308.3	0308.5	1.2	69.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0308.4	0308.7	1.5	2.0	.5		
	3750	TYKW	5	S	0308.4	0308.7	1.5	3.0	1.0		
	4995	LEAR	8	S	0308.5	0308.5	.6	5.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0308.5	0308.6	1.0	69.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0311.3	0311.6	1.5	4.0	1.5		
	9400	TYKW	21	GRF	0315.0	0352.0	100.0	4.0	2.0		
	3750	TYKW	21	GRF	0316.0	0352.0	130.0	3.0	1.5		
	410	LEAR	8	S	0324.0	0324.1	1.0	24.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0324.3	0324.6	.7	19.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0404.6	0404.8	.5	19.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0404.6	0405.0	.5	21.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0411.0	0411.5	1.0	39.0	10.0		
	3750	TYKW	5	S	0411.0	0411.5	2.0	15.0	4.0		
	2695	LEAR	8	S	0411.1	0411.6	.9	9.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0411.2	0411.5	1.0	49.0			
	1415	LEAR	47	GB	0411.3	0411.3	1.0	110.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	8800	LEAR	8	S	0411.3	0411.3	1.2	47.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0411.3	0411.5	.5	11.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0411.3	0411.5	1.2	23.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0411.4	0411.6	.5	94.0	15.0		
	2950	GORK	1	S	0411.4	0411.7	3.7	9.3			
	9400	TYKW	29	PBI	0412.0		7.0	3.0	1.5		
	410	PALE	8	S	0421.3	0421.3	1.0	49.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0422.0	0440.1	25.0	6.0	2.0		
	610	PALE	8	S	0423.1	0423.3	2.0	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0427.0	0429.0	5.0	2.0	7.0		
	410	PALE	47	GB	0430.1	0430.3	1.2	119.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0433.5	0433.8	1.6	100.0			QL=6 ST=2 TYP=5
	410	LEAR	4	S/F	0433.8	0433.8	10.0	21.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0609.0	0612.5	15.0	6.0	2.5		
	3750	TYKW	21	GRF	0609.0	0645.0	120.0	4.0	2.0		
	2000	TYKW	21	GRF	0609.0	0700.0	110.0	2.0	1.0		
	2950	GORK	20	GRF	0609.0	0612.3	128.0	7.3			
	2000	TYKW	45	C	0609.5	0610.8	5.5	34.0	4.0		
	6100	KISV	21	GRF	0609.5	0612.7	18.0	7.0			
	9100	GORK	20	GRF	0609.8	0612.8	13.9	11.0	5.0		
	9400	TYKW	5	S	0610.0	0613.0	20.0	8.0	2.5		
	2840	PEKG	45	C	0610.0	0612.8	6.0	7.5	2.8		
	8800	LEAR	20	GRF	0610.0	0612.8	14.0	16.0			QL=6 ST=2 TYP=2
	2695	LEAR	20	GRF	0610.0	0612.8	14.0	11.0			QL=6 ST=2 TYP=2
	4995	LEAR	20	GRF	0610.0	0612.8	14.0	10.0			QL=6 ST=2 TYP=2
	15400	LEAR	20	GRF	0610.0	0612.8	14.0	10.0			QL=6 ST=2 TYP=2
	9395	PEKG	1	S	0612.0	0612.5	8.0	9.4	3.2		
	2000	TYKW	29	PBI	0615.0		15.0	2.0	1.0		
	9400	TYKW	20	GRF	0638.0	0646.0	70.0	5.0	2.0		
	6100	KISV	21	GRF	0638.5	0642.7	25.0	5.0			
	1000	TYKW	8	S	0642.6	0642.7	.4	22.0	5.0		
	930	BORD	8	S	0642.7	0642.7	.2	129.0	1.0		
	650	GORK	1	S	0704.8	0705.5	1.2	5.8			
	950	GORK	2	S/F	0705.3	0705.7	.6	3.9			
	650	GORK	29	PBI	0706.0	0706.3		2.3			
	6100	KISV	1	S	0817.1	0817.5	1.0	4.0			
	2950	GORK	21	GRF	0902.0	0911.0	65.0	5.2			
	3000	POTS	21	GRF	0907.0	0908.0	38.0	7.5			
	2950	GORK	1	S	0907.4	0908.2	1.9	3.9			
	950	GORK	4	S/F	0907.4	0908.4	2.0	19.6			
	930	BORD	41	F	0907.8	0908.5	1.0	18.0	2.0		
	650	GORK	40	F	0907.9	0908.4	1.0	9.0			
	1470	POTS	8	S	0908.5	0908.7	.8	48.0			
	1470	POTS	21	GRF	0908.5	0910.0	49.0	3.0			
	536	ONDR	8	S	1032.2	1032.2	.1	21.0			
	2950	GORK	20	GRF	1048.0	1142.5	78.0	5.8			
	410	SGMR	47	GB	1049.8	1050.6	7.3	50.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1050.6	1050.6	1.0	130.0			QL=6 ST=2 TYP=5
	234	POTS	41	F	1051.5	1051.6	5.3	165.0	1.0		
	2800	OTTA	20	GRF	1130.0	1220.0	210.0	6.6	3.3		
	9100	GORK	22	GRF	1133.8	1140.4	25.7D	13.0			
	6100	KISV	45	C	1136.5	1138.1	9.0	6.0			
	6100	KISV			1136.5	1140.9		6.0			
	536	ONDR	8	S	1137.6	1137.6	.1	62.0			
	930	BORD	8	S	1138.0	1138.1	.2	132.0	1.0		
	610	SGMR	8	S	1250.1	1250.6	.7	27.0			QL=6 ST=2 TYP=3
	9400	HUAN	21	GRF	1304.0	1315.0	17.1	3.6	3.0		0
	9400	HUAN	1	S	1310.3	1311.7	3.4	5.4	3.9		R
	1470	POTS	8	S	1311.5	1311.8	.8	11.0			
	9400	HUAN	22	GRF	1544.9	1550.0	16.6	9.0	2.8		R
	8400	BERN	45	C	1545.0	1550.2	9.0	25.0			
	11800	BERN	45	C	1545.0	1550.2	9.0	22.0			
	2800	OTTA	21	GRF	1545.0	1551.0	15.0	3.8	1.9		
	2800	OTTA	1	S	1545.2	1546.2	2.0	4.0	1.8		
	2800	OTTA	8	S	1550.0	1550.1	.8	5.2	2.6		
	930	BORD	41	F	1550.0	1550.1	.6	20.0	1.0		
	9400	TYKW	5	S	2115.0	2117.5	9.0	16.0	7.0		
	9400	TYKW	21	GRF	2115.0	2140.0	250.0	32.0	16.0		
	3750	TYKW	21	GRF	2115.0	2300.0	250.0	4.0	20.4		
20	260	ONDR	44	NS	0550.0E	1242.0U	501.0D	94.0U			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	204	IZMI	43	NS	0600.0		360.0	60.0			
	127	TORN	43	NS	0638.0		454.0		3.0		V2
	410	SGMR	43	NS	1017.0	1437.8	780.0	33.0			QL=6 ST=3 TYP=1
	245	SGMR	43	NS	1017.0	1807.6	780.0	139.0			QL=6 ST=3 TYP=1
	410	PALE	43	NS	1645.0	0110.6	700.0D	94.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1645.0	1822.8	700.0D	169.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D		2.0		
	245	LEAR	43	NS	2301.0	0613.1	652.0D	69.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0020.0	0045.0	60.0	2.0	1.0		
	245	LEAR	47	GB	0119.1	0119.6	.9	51.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0119.3	0119.6	.7	24.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0138.8	0138.8	1.2	41.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0138.8	0138.8	1.2	18.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0500.0	0508.0	35.0	4.0	1.5		
	3750	TYKW	20	GRF	0553.0	0558.0	50.0	4.0	1.5		
	6100	KISV	2	S/F	0553.5	0557.5	8.5	6.0			
	9395	PEKG	20	GRF	0556.0	0557.8	19.0	8.4	4.2		
	2840	PEKG	20	GRF	0600.0	0612.0	15.0	4.8	2.6		
	610	LEAR	47	GB	0658.8	0700.1	1.5	130.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	0700.0	0700.3	1.0	5.0	1.5		
	1000	TYKW	45	C	0840.6	0840.9	.7	9.0	3.0		
	6100	KISV	2	S/F	0941.3	0943.3	4.0	5.0			
	29	UPIC	3	S	0959.3	0959.5	.4				
	33	UPIC	2	S/F	0959.3	0959.5	.5				
	536	ONDR	41	F	1016.3	1029.5	42.0	15.0			
	6100	KISV	21	GRF	1118.0	1121.6	18.0	6.0			
	536	ONDR	41	F	1149.0	1154.6	21.2	6.0			
	930	BORD	8	S	1215.0	1215.0	.1	21.0	1.0		
	245	SGMR	47	GB	1239.3	1241.5	4.0	70.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	1239.6	1239.8	1.2	18.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1240.3	1240.5	1.8	32.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	1411.1	1411.6	4.7	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	20	GRF	1530.0	1620.0	90.0	2.0	1.0		
	930	BORD	41	F	1538.2	1538.2	1.9	24.0	1.0		
	2800	OTTA	21	GRF	1705.0	1830.0	120.0	2.0	1.0		
	2800	OTTA	40	F	1746.0	1753.4	13.0	100.0			
	1415	PALE	8	S	1746.6	1747.6	2.0	43.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	1746.6	1748.0	2.5	51.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1752.3	1753.3	2.7	82.0			QL=6 ST=2 TYP=5
	200	HIRA	42	SER	2001.7	2002.7	31.0U	120.0			MR
	2800	OTTA	3	S	2016.5	2017.0	2.0	10.8	3.6		
	3750	TYKW	21	GRF	2220.0	2232.0	50.0	2.0	1.0		
	1000	TYKW	5	S	2222.8	2223.0	.5	3.0	1.0		
	2000	TYKW	5	S	2240.0	2240.7	2.0	4.0	1.5		
	3750	TYKW	5	S	2240.0	2240.7	2.5	2.0	.7		
	1000	TYKW	45	C	2240.0	2241.2	2.0	6.0	1.5		
21	410	LEAR	43	NS	0105.3	0707.0	527.7	56.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0625.0E	1256.0U	455.0D	13.0U			
	127	TORN	43	NS	0820.0	0928.1	266.0	40.0			VO,DISTURBED
	245	SGMR	43	NS	1244.0	1257.8	631.0D	219.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1650.0	0157.8	701.0D	100.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D		4.0		
	200	HIRA	43	NS	2250.0	0205.0	250.0	10.0	3.0		0
	245	LEAR	43	NS	2300.0	0157.8	653.0D	119.0			QL=6 ST=2 TYP=1
	1000	TYKW	28	PRE	0010.0	0017.0	7.0	1.5	.7		
	3750	TYKW	21	GRF	0014.0	0040.0	80.0	6.0	3.0D		
	9400	TYKW	21	GRF	0015.0	0035.0	75.0	6.0	3.0D		
	2695	PENT	21	GRF	0015.0	0050.0	80.0D	8.6			
	1000	TYKW	45	C	0017.0	0021.0	11.0	10.0	6.0		
	2000	TYKW	21	GRF	0017.0	0021.0	70.0	6.0	3.0D		
	3750	TYKW	5	S	0019.0	0020.0	8.0	2.0	1.0		
	1000	TYKW	30	PBI	0028.0		60.0	2.0	1.0D		
	3750	TYKW	5	S	0030.0	0031.0	3.0	1.0	.5		
	2000	TYKW	45	C	0030.0	0031.2	2.5	7.0	1.0D		
	3750	TYKW	5	S	0033.5	0034.7	3.5	3.0	1.0		
	1000	TYKW	5	S	0041.4	0041.6	.5	13.0	4.0		
	2000	TYKW	45	C	0110.0	0113.9U	8.0	264.0	40.0		
	9400	TYKW	5	S	0110.0	0114.0U	10.0	4.0	2.0		
	2695	PENT	4	S/F	0110.0	0115.0	9.0	485.0			
	3750	TYKW	5	S	0111.0U	0114.0U	8.0U	4.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	1000	TYKW	45	C	0111.0U	0114.6U	6.0U	13.0	1.5		
	2695	LEAR	47	GB	0112.8	0115.0	6.3	360.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0113.8	0114.6	4.8	62.0			QL=6 ST=2 TYP=5
	2000	TYKW	30	PBI	0118.0		9.0	2.0	1.0		
	9400	TYKW	5	S	0120.0	0121.0	3.0	3.0	1.0		
	2000	TYKW	45	C	0120.2	0121.0	2.5U	49.0	10.0		
	2000	TYKW			0120.2	0122.3		48.0			
	1000	TYKW	5	S	0120.5U	0121.2U	1.5U	3.0	.5		
	3750	TYKW	5	S	0121.0U	0121.3U	1.0U	1.5	.5		
	2695	PENT	4	S/F	0121.7	0122.2	2.0	28.0	7.2		
	2695	PALE	8	S	0122.0	0122.1	1.1	21.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0122.0	0122.1	1.0	28.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0622.0	0622.5	1.5	5.0	1.0		
	536	ONDR	41	F	0722.6	0727.7	11.2	17.0			
	930	BORD	41	F	0847.0	0847.7	1.0	16.0	1.0		
	410	SGMR	47	GB	1044.3	1044.6	1.5	239.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	1210.0	1220.0	50.0	2.6	1.3		
	2800	OTTA	20	GRF	1335.0	1410.0	90.0	4.4	2.2		
	2800	OTTA	20	GRF	1510.0	1520.0	30.0	2.4	1.2		
	9400	HUAN	20	GRF	1555.7	1611.2	57.8	5.2	1.6		0
	9400	HUAN	20	GRF	1816.0	1830.5	30.2	3.5	1.7		0
	3750	TYKW	20	GRF	2314.0	2340.0	80.0	2.0	1.0		
22	410	LEAR	43	NS	0247.8	0312.5	312.2	38.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0602.0E	1008.0U	464.0D	240.0			
	127	TORN	43	NS	0820.0	1032.4	316.0	90.0			V1
	204	IZMI	43	NS	0930.0		150.0	38.0			
	410	SGMR	43	NS	1019.0	1201.8	775.0D	20.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1019.0	2220.6	775.0D	60.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1648.0	0035.8	707.0D	130.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	2100.0	2206.0	180.0	24.0	5.0		0
	208	VORO	44	NS	2200.0E	2203.0	300.0D	21.0			
	245	LEAR	43	NS	2259.0	0008.0	655.0D	29.0			QL=6 ST=2 TYP=1
	2950	GORK	1	S	0320.9	0321.1	.9	4.0	2.0		
	9400	TYKW	20	GRF	0410.0	0439.0	100.0	10.0	4.0		
	3750	TYKW	20	GRF	0432.0	0438.0	65.0	5.0	2.0		
	9100	GORK	20	GRF	0433.0	0439.4	57.0	10.0			
	2000	TYKW	20	GRF	0434.0	0438.0	60.0	3.0	1.5		
	2840	PEKG	20	GRF	0434.0	0438.0	26.0	6.5	2.3		
	9395	PEKG	20	GRF	0434.0	0438.7	26.0	9.7	3.2		
	410	LEAR	47	GB	0946.8	0948.5	2.2	56.0			QL=6 ST=2 TYP=5
	536	ONDR	41	F	1012.7	1012.9	9.4	7.0			
	9400	HUAN	20	GRF	1348.0	1403.5	39.6	5.2	2.1		0
	410	PALE	8	S	1958.1	1958.8	1.0	22.0			QL=6 ST=2 TYP=3
	245	PALE	8	S	1958.1	1958.8	1.0	19.0			QL=6 ST=2 TYP=3
	610	PALE	8	S	1958.1	1958.8	.9	17.0			QL=6 ST=2 TYP=3
23	260	ONDR	44	NS	0613.0E	1315.0U	479.0D	6.0U			
	410	PALE	43	NS	2055.0	2119.3	455.0D	160.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	2055.0	2334.3	455.0D	130.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D				
	245	LEAR	43	NS	2347.1	0936.8	606.9D	61.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0443.0	0455.0	30.0	2.0	1.0		
	9400	TYKW	5	S	0447.0	0454.0	25.0	4.0	2.0		
	410	LEAR	47	GB	0447.3	0447.5	1.7	119.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0520.0	0535.0	35.0	2.0	1.0		
	9400	TYKW	5	S	0627.0	0633.0	15.0U	6.0	3.0U		INTERFERENCE
	3750	TYKW	5	S	0628.0	0632.0	15.0	1.5	.7		
	9100	GORK	20	GRF	0706.6	0729.1	53.0	7.7			
	9395	PEKG	45	C	0845.0	0847.7	8.0D	12.1	3.8		
	2840	PEKG	1	S	0845.0	0848.0	7.0	2.0	.9		
	9100	GORK	21	GRF	0846.2	0857.9	30.0	10.0			
	6100	KISV	45	C	0846.7	0847.7	5.0	7.0			
	6100	KISV			0846.7	0850.8		5.0			
	9100	GORK	1	S	0847.2	0847.6	.8	8.0			
	2950	GORK	1	S	0847.3	0848.0	1.6	2.6	1.3		
	9500	POTS	20	GRF	1022.0	1027.5	13.0	9.0			
	9100	GORK	1	S	1026.3	1027.6	2.1	13.0			
	6100	KISV	2	S/F	1026.5	1028.0	3.5	8.0			
	9100	GORK	29	PBI	1028.4	1028.4	44.0	10.0			
	9400	HUAN	20	GRF	1358.6	1413.0	41.0	5.2	1.9		0

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	930	BORD	8	S	1443.0	1443.0	.1	22.0	1.0		
	9400	HUAN	22	GRF	1631.4	1657.3U	43.7	3.5	1.4		0
	410	SGMR	8	S	1851.6	1851.8	1.4	37.0			QL=6 ST=2 TYP=3
	2800	OTTA	240	R	2145.0	2200.0	15.0	2.4	1.2		
	3750	TYKW	20	GRF	2303.0	2308.0	35.0	2.0	1.0		
24	260	ONDR	44	NS	0633.0E	1315.0U	457.0D	13.0U			
	245	SGMR	43	NS	1221.0	2256.3	650.0D	110.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1715.0	2212.8	660.0D	130.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	2045.0	0639.0	745.0D	35.0	7.0		WL
	208	VORO	44	NS	2200.0E		300.0D		3.0		
	410	PALE	43	NS	2254.0	2254.1	321.0D	28.0			QL=6 ST=2 TYP=1
	9400	TYKW	5	S	0018.0	0020.4	10.0	6.0	2.0		
	8800	LEAR	4	S/F	0018.1	0020.6	3.4	11.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0018.1	0020.6	3.4	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0019.0	0020.5	15.0	2.0	1.0		
	3750	TYKW	20	GRF	0316.0	0319.0	70.0	3.0	1.5		
	3750	TYKW	5	S	0632.0	0633.5	8.0	2.0	1.0		
	6100	KISV	2	S/F	0650.5	0651.2	5.5	5.0			
	410	LEAR	8	S	0728.3	0728.5	1.2	39.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0835.1	0835.1	.2	13.0			QL=6 ST=2 TYP=3
	1470	POTS	8	S	0905.7	0906.2	1.0	11.0			
	6100	KISV	1	S	0938.7	0938.9	1.0	4.0			
	9400	HUAN	20	GRF	1315.2	1347.3	59.2	7.2	3.9		0
	9400	HUAN	22	GRF	1423.4	1442.5	31.7	5.4	2.6		R
	2800	OTTA	20	GRF	1430.0	1445.0	30.0	2.0	1.0		
	9400	HUAN	1	S	1529.5	1530.5	3.6	9.0	4.7		0
	9400	HUAN	3	S	1822.7	1823.8	2.6	27.1	6.3		R
	500	HIRA	22	GRF	2228.0	2324.0	83.0	8.0	4.0		WR
	208	VORO	4	S/F	2244.0	2246.0	3.0	200.0D			
	410	LEAR	8	S	2304.8	2305.1	1.0	15.0			QL=6 ST=2 TYP=3
25	204	IZMI	44	NS	0600.0E		360.0D	43.0			
	260	ONDR	44	NS	0619.0E	0808.0U	463.0D	44.0U			
	410	SGMR	43	NS	1022.0	1339.1	767.0D	41.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1022.0	1938.1	767.0D	180.0			QL=6 ST=2 TYP=1
	610	SGMR	43	NS	1342.3	1349.1	566.7D	42.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1645.0	0015.1	685.0D	430.0			QL=6 ST=2 TYP=1
	200	HIRA	43	NS	2100.0	0706.0	730.0D	120.0	15.0		ML
	208	VORO	44	NS	2200.0E		300.0D		4.0		
	245	LEAR	43	NS	2256.0	0613.6	659.0D	300.0			QL=6 ST=2 TYP=1
	500	HIRA	22	GRF	0224.0	0342.6	400.0D	20.0	8.0		WL
	650	GORK	4	S/F	0342.3	0342.9	1.2	57.0			
	9400	TYKW	21	GRF	0440.0	0500.0	100.0	3.0	1.5		
	3750	TYKW	21	GRF	0440.0	0530.0	170.0	4.0	2.0		
	2000	TYKW	21	GRF	0444.0	0526.0	135.0	2.0	1.0		
	9100	GORK	2	S/F	0449.4	0452.6	5.6	14.0			
	9400	TYKW	5	S	0451.0	0452.6	3.0	11.0	3.0		
	8800	LEAR	4	S/F	0451.1	0452.8	2.7	10.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0451.8	0452.8	2.7	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0452.0	0452.7	3.0	16.0	4.0		
	2000	TYKW	5	S	0452.0	0452.8	5.0	13.0	3.0		
	610	LEAR	8	S	0452.5	0452.6	.1	26.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0452.5	0452.6	2.7	11.0			
	2695	LEAR	4	S/F	0452.5	0452.6	2.5	20.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0452.5	0452.8	2.5	4.5	2.0		
	2950	GORK	1	S	0452.5	0452.8	1.6	13.3	6.5		
	950	GORK	1	S	0452.5	0452.9	3.3	2.0			
	1415	LEAR	4	S/F	0452.6	0452.8	2.2	11.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0554.0	0556.0	8.0	1.5	.7		
	410	LEAR	8	S	0608.5	0608.6	1.0	20.0			QL=6 ST=2 TYP=3
	410	LEAR	20	GRF	0625.3	0628.5	3.8	13.0			QL=6 ST=2 TYP=2
	650	GORK	22	GRF	0625.3	0629.4	25.9	6.0	3.0		
	3750	TYKW	5	S	0638.5	0639.7	6.0	4.0	1.5		
	6100	KISV	2	S/F	0638.9	0639.8	3.0	4.0			
	9400	TYKW	5	S	0639.0	0639.7	2.0	5.0	1.5		
	6100	KISV	1	S	0648.0	0648.4	2.0	3.0			
	234	POTS	4	S/F	0724.3	0724.6	8.7	330.0	50.0		
	3100	CRIM	1	S	0852.0	0852.8	3.0	17.0	5.0		
	127	TORN	45	C	1116.0	1117.1	4.2	130.0	10.0		
	127	TORN	45	C	1126.2	1126.6	4.4	100.0	50.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	930	BORD	41	F	1207.2	1207.4	.2	15.0	1.0		
	610	SGMR	47	GB	1244.8	1247.8	55.3	200.0			QL=6 ST=2 TYP=5
	9400	HUAN	20	GRF	1311.6	1341.6	45.6	5.3	3.6		R
	2800	OTTA	240	R	1520.0	1545.0	25.0	3.0	1.2		
	2800	OTTA	240	AR	1920.0	1950.0	30.0	2.4	1.2		
	2800	OTTA	20	GRF	1932.0	1938.0	16.0	4.0	2.0		
	2800	OTTA	240	R	2150.0	2200.0	10.0	2.6	1.3		
	3750	TYKW	5	S	2155.0	2201.0	20.0	3.0	1.5		
	3750	TYKW	21	GRF	2235.0	2247.5	80.0	4.0	1.5		
	9400	TYKW	20	GRF	2300.0	2335.0	70.0	4.0	2.0		
	2695	PENT	20	GRF	2300.0	2315.0	50.0	3.8	2.0		
	3750	TYKW	21	GRF	2302.0	2311.5	50.0	4.0	2.0		
	2000	TYKW	20	GRF	2302.0	2312.0	50.0	2.0	1.0		
	3750	TYKW	5	S	2321.0	2322.8	9.0	3.0	1.0		
	1000	TYKW	45	C	2345.0	0013.7	95.0	14.0	3.0		
26	410	LEAR	43	NS	0003.5	0009.8	591.5D	13.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0553.0E	1115.0U	485.0D	27.0U			
	204	IZMI	44	NS	0600.0E		360.0D	120.0			
	127	TORN	43	NS	0611.0		529.0		8.0		V2,DISTURBED
	245	SGMR	43	NS	1023.0	2132.0	764.0D	189.0			QL=6 ST=3 TYP=1
	100	HIRA	44	NS	2006.0E		785.0D		62.0		
	200	HIRA	44	NS	2006.0E	0813.0	785.0D	120.0	40.0		ML
	208	VORO	44	NS	2200.0E		300.0D		17.0		
	245	LEAR	43	NS	2312.1	0855.0	642.9D	340.0			QL=6 ST=2 TYP=1
	2000	TYKW	20	GRF	0240.0	0303.0	80.0	3.0	1.5		
	3750	TYKW	20	GRF	0240.0	0303.0U	65.0	5.0D	2.0D		
	9400	TYKW	20	GRF	0240.0	0303.5	80.0	5.0	2.0		
	1000	TYKW	45	C	0257.0	0303.7	18.0	3.5	1.0D		
	1000	TYKW	45	C	0400.0	0402.2	9.0	1.0	.5		
	245	LEAR	47	GB	0407.6	0408.0	.5	130.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0407.6	0408.0	.5	36.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0416.0	0421.1	29.0	3.0	1.0		
	1000	TYKW	5	S	0454.0	0458.0	10.0	2.0	1.0		
	650	GORK	22	GRF	0527.7	0549.8	64.3	7.5	3.5		
	930	BORD	8	S	1007.2	1007.2	.2	43.0	1.0		
	536	ONDR	8	S	1037.6	1037.6	.1	10.0			
	536	ONDR	8	S	1125.1	1125.1	.1	10.0			
	234	POTS	8	S	1236.4	1236.5	5.0	825.0	280.0		
	113	POTS	42	SER	1300.5	1318.0	18.0	200.0	1.0		
	3100	BERN	3	S	1424.8	1426.7	17.0	17.0			
	11800	BERN	46	C	1424.8	1426.8	17.0	100.0			
	8400	BERN	46	C	1424.8	1426.9	17.0	133.0			
	2800	OTTA	21	GRF	1425.0	1429.0	20.0	3.4	1.7		
	9400	HUAN	4	S/F	1425.5	1426.7	2.9	92.4	40.6		L
	4995	SGMR	47	GB	1426.1	1426.8	6.4	74.0			QL=6 ST=2 TYP=5
	2800	OTTA	2	S/F	1426.2	1426.3	1.8	6.2	3.2		
	8800	SGMR	47	GB	1426.3	1426.8	2.2	100.0			QL=6 ST=2 TYP=5
	15400	SGMR	8	S	1426.3	1426.8	1.7	47.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1428.4	1428.4	12.5	7.4	4.6		0
	2800	OTTA	240	R	1510.0	1515.0	5.0	2.4	1.2		
	2800	OTTA	20	GRF	1720.0	1855.0	130.0	4.2	2.1		
	2800	OTTA	240	R	1950.0	2025.0	35.0	3.6	1.8		
	3750	TYKW	5	S	2106.5	2106.8	1.5	20.0	7.0		
	4995	SGMR	8	S	2106.8	2107.1	1.7	40.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	2106.9	2107.1	1.0	6.6	3.3		
	2000	TYKW	21	GRF	2200.0	2313.0	215.0	6.0	3.0		
	3750	TYKW	5	S	2204.0	2205.4	4.0	5.0	2.0		
	2800	OTTA	240	R	2220.0	2230.0	10.0	3.0	1.5		
	3750	TYKW	21	GRF	2235.0	2255.0	80.0	6.0	3.0		
	2695	PENT	21	GRF	2245.0	2310.0	70.0	7.6	2.8		
	9400	TYKW	45	C	2253.0	2301.6	27.0	52.0	18.0		
	3750	TYKW	45	C	2256.0	2301.7	19.0	38.0	11.0		
	4995	LEAR	47	GB	2300.6	2301.6	5.5	66.0			QL=5 ST=2 TYP=5
	2695	PENT	1	S	2301.0	2302.0	2.0	4.6	2.3		
	8800	LEAR	47	GB	2301.1	2301.6	5.2	53.0			QL=5 ST=2 TYP=5
	3750	TYKW	29	PBI	2315.0		15.0	6.0	3.0		
	9400	TYKW	30	PBI	2320.0		75.0	12.0	4.0		
	3750	TYKW	20	GRF	2356.0	0006.0	35.0	5.0	2.0		
27	410	LEAR	43	NS	0221.0	0224.3	454.0D	65.0			QL=6 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
27	610	LEAR	43	NS	0221.0	0440.1	454.0D	31.0			QL=6 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D	200.0			
	260	ONDR	44	NS	0610.0E	1009.0U	471.0D	18.0U			
	127	TORN	43	NS	0632.0		548.0		23.0		V2
	100	HIRA	44	NS	2004.0E	0406.0	785.0D	350.0	130.0		ML
	200	HIRA	44	NS	2004.0E	0538.0	785.0D	250.0	115.0		ML
	208	VORO	44	NS	2200.0E		300.0D		63.0		
	410	LEAR	43	NS	2255.0	0153.1	660.0D	39.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2255.0	0155.3	660.0D	640.0			QL=6 ST=2 TYP=1
	9400	TYKW	5	S	0001.0	0010.0	24.0	7.0	3.5		
	9395	PEKG	20	GRF	0002.0	0012.0	25.0	5.9	2.2		
	500	HIRA	24	R	0019.0	0230.6	521.0D	60.0	30.0		SL
	3750	TYKW	5	S	0040.0	0040.4	2.0	3.0	1.0		
	3750	TYKW	5	S	0042.4	0042.7	.6	2.0	.7		
	3750	TYKW	21	GRF	0109.0	0125.0	95.0U	7.0	4.0U		RAIN
	2840	PEKG	20	GRF	0110.0	0118.7	26.0	5.2	2.1		
	2000	TYKW	5	S	0111.0	0117.5	20.0	3.0	1.5		
	1000	TYKW	45	C	0117.0	0117.4	1.0	8.0	2.0		
	9395	PEKG	20	GRF	0118.0	0124.0	20.0	4.5	1.6		
	9400	TYKW	28	PRE	0119.0U	0139.0U	20.0U	9.0U	4.0U		RAIN
	2000	TYKW	5	S	0137.0	0139.7	4.0	8.0	3.0		
	3750	TYKW	5	S	0138.0	0139.4	7.0	123.0	23.0		
	9395	PEKG	3	S	0138.0	0139.4	3.0	282.6	24.2		
	2840	PEKG	45	C	0138.0	0139.6	14.0	53.9	20.3		
	2695	PENT	3	S	0138.7	0139.3	2.0	20.0	10.0		
	4995	LEAR	47	GB	0138.8	0139.3	9.3	300.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0138.8	0139.3	9.3	370.0			QL=6 ST=2 TYP=5
	9400	TYKW	5	S	0139.0	0139.4	6.0	280.0	45.0		
	4995	MANI	3	S	0139.0	0139.5	2.5	133.5	44.5		
	15400	LEAR	47	GB	0139.1	0139.3	7.7	81.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0139.1	0139.6	3.5	27.0			QL=6 ST=2 TYP=3
	17000	NOBE	20	GRF	0139.2	0139.4	50.0	40.0			0
	2000	TYKW	29	PBI	0141.0		30.0	2.0	1.0		
	9395	PEKG	29	PBI	0141.0		18.0	34.0	12.1		
	9400	TYKW	29	PBI	0145.0		55.0U	14.0	7.0U		
	3750	TYKW	29	PBI	0145.0		20.0	8.0	3.0		
	1000	TYKW	45	C	0145.0U	0230.9	70.0U	6.0U	1.5U		RAIN
	2000	TYKW	21	GRF	0257.0U	0350.0	105.0U	5.0	2.5		RAIN
	9395	PEKG	28	PRE	0257.0		27.0	10.2	4.6		
	3750	TYKW	21	GRF	0259.0U	0314.0	102.0U	14.0	7.0		RAIN
	9400	TYKW	28	PRE	0300.0U	0314.0	23.0U	11.0	4.0U		RAIN
	1000	TYKW	45	C	0305.0U	0502.7	165.0U	6.0	1.5U		RAIN
	2840	PEKG	3	S	0322.0	0325.7	4.0	35.3	10.3		
	3750	TYKW	5	S	0323.0	0325.8	13.0	80.0	16.0		
	9400	TYKW	45	C	0323.0	0325.8	17.0	134.0	60.0		
	2000	TYKW	5	S	0324.0	0325.9	4.0	5.0	1.5		
	9395	PEKG	3	S	0324.0	0325.8	3.0	130.0	48.1		
	4995	LEAR	47	GB	0324.3	0325.8	20.8	169.0			QL=6 ST=2 TYP=5
	4995	MANI	3	S	0324.3	0326.0	4.7	276.5	92.2		
	8800	LEAR	47	GB	0324.8	0325.8	25.7	169.0			QL=6 ST=2 TYP=5
	17000	NOBE	20	GRF	0324.9	0325.8	43.0	30.0			0
	35000	NAGO	20	GRF	0325.0	0335.0	45.0	19.0			
	15400	LEAR	4	S/F	0325.1	0326.0	26.4	40.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0325.3	0325.8	3.5	27.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0326.0E	0326.5	2.1D	98.0			
	2840	PEKG	29	PBI	0326.0		28.0	12.9	3.4		
	2950	GORK	3	S	0326.5	0326.5	1.5D	28.0			
	2950	GORK	21	GRF	0326.5E	0331.5	513.0D	22.0			
	9100	GORK	21	GRF	0326.8	0552.6	444.0D	54.0			
	9395	PEKG	29	PBI	0327.0		55.0	43.2	19.3		
	650	GORK	22	GRF	0329.0E	0441.0	511.0D	40.0			
	3750	TYKW	29	PBI	0336.0		60.0	9.0	4.5		
	9400	TYKW	30	PBI	0340.0		60.0	29.0	13.0		
	9400	TYKW	5	S	0344.5	0345.2	1.5	4.0	1.5		
	3750	TYKW	21	GRF	0448.0	0535.0	155.0	14.0	6.0		
	9400	TYKW	28	PRE	0452.0	0543.9	53.0	16.0	6.0		
	2000	TYKW	21	GRF	0500.0	0535.0	150.0	4.0	2.0		
	3750	TYKW	5	S	0517.0	0520.5	14.0	3.0	1.5		
	9395	PEKG	28	PRE	0538.0		9.0	9.0	2.8		
	6100	KISV	28	PRE	0539.0	0544.0	6.0	10.0			
	3750	TYKW	45	C	0541.0	0549.6	18.0	46.0	13.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
27	4995	LEAR	47	GB	0541.3	0549.3	41.7	60.0			QL=6 ST=3 TYP=5
	8800	LEAR	47	GB	0542.5	0549.1	40.3	60.0			QL=6 ST=3 TYP=5
	15400	LEAR	20	GRF	0543.0	0555.3	37.8	22.0			QL=6 ST=3 TYP=2
	9400	TYKW	5	S	0545.0	0549.2	15.0	60.0	28.0		
	6100	KISV	4	S/F	0545.0	0549.3	16.5	56.0			
	2695	LEAR	4	S/F	0545.3	0549.6	12.5	18.0			QL=6 ST=3 TYP=3
	3100	BERN	3	S	0547.0	0549.3	15.0	24.0			
	8400	BERN	3	S	0547.0	0549.3	15.0	73.0			
	9395	PEKG	3	S	0547.0	0549.3	6.0	48.7	22.5		
	2840	PEKG	3	S	0547.0	0549.5	15.0	15.1	2.8		
	15400	LEAR	4	S/F	0547.6	0548.3	14.0	30.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0548.3	0549.6	3.3	32.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0548.5	0549.6	10.0	1.5	.7		
	4995	ATHN	47	GB	0548.6	0549.3	6.9	50.0			QL=6 ST=2 TYP=5
	4995	MANI	3	S	0549.0	0550.1	1.5	48.5	16.2		
	2695	ATHN	4	S/F	0549.1	0549.6	4.4	11.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0549.1	0550.2	2.9	10.5			
	9100	GORK	1	S	0549.8	0550.1	2.0	28.0			
	9395	PEKG	29	PBI	0553.0		50.0	39.0	15.2		
	3750	TYKW	29	PBI	0559.0		45.0	8.0	4.0		
	9400	TYKW	29	PBI	0600.0		70.0	27.0	1.0		
	6100	KISV	29	PBI	0601.5	0602.8	40.0	11.0			
	536	ONDR	40	F	0610.0E	0944.0U	471.0D	28.0U			
	3100	CRIM	1	S	0644.0	0649.5	16.0	18.0	3.0		
	113	POTS	8	S	0740.2	0740.2	.1	280.0	90.0		
	950	GORK	22	GRF	0830.0E	0830.0	99.0D	13.0			
	9100	GORK	3	S	0903.3	0904.6	2.9	42.0			
	8400	BERN	3	S	0911.0	0912.7	16.0	69.0			
	6100	KISV	4	S/F	0911.0	0912.8	7.0	70.0			
	3100	BERN	3	S	0911.0	0912.9	16.0	51.0			
	3000	POTS	3	S	0911.0	0912.9	17.0	39.0			
	3100	CRIM	3	S	0911.0	0913.0	13.0	39.0	13.0		
	9500	POTS	29	PBI	0911.5	0912.7	74.0	36.0			
	4995	LEAR	47	GB	0911.5	0912.8	8.1	100.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0911.8	0912.8	3.0	33.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0912.0	0912.8	3.0	50.0			QL=6 ST=2 TYP=3
	3000	IZMI	5	S	0912.0	0913.0	2.4	37.0	24.0		
	4995	MANI	3	S	0912.0	0913.4	4.0	129.0	43.0		
	2950	GORK	3	S	0912.5	0913.8	3.6	31.0			
	6100	KISV	29	PBI	0918.0	0918.0	27.0	14.0			
	234	POTS	4	S/F	0947.5	0947.6	.4	850.0	160.0		
	234	POTS	8	S	1026.3	1026.5	.3	700.0	250.0		
	33	UPIC	2	S/F	1039.1	1039.1	.3				
	29	UPIC	2	S/F	1039.5	1039.6	.5				
	234	POTS	4	S/F	1137.0	1137.6	1.0	360.0	35.0		III
	113	POTS	4	S/F	1137.5	1139.0	2.5	600.0	60.0		III
	2800	OTTA	20	GRF	1205.0	1240.0	115.0	5.6	2.6		
	113	POTS	4	S/F	1225.5	1226.9	2.1	900.0	180.0		
	610	SGMR	47	GB	1257.8	1300.5	7.3	64.0			QL=6 ST=2 TYP=5
	9400	HUAN	22	GRF	1317.2	1319.0	10.3	14.2	5.1		0
	4995	SGMR	8	S	1318.6	1319.1	1.9	19.0			QL=6 ST=2 TYP=3
	8800	SGMR	4	S/F	1318.8	1319.1	4.5	27.0			QL=6 ST=2 TYP=3
	33	UPIC	45	C	1324.8	1324.9	.7				
	29	UPIC	45	C	1324.9	1325.3	.7				
	113	POTS	4	S/F	1519.5	1520.6	2.0	800.0	160.0		
	2800	OTTA	27AF	RF	1520.0		250.0	3.6	3.1		
	2800	OTTA	24	R	1520.0	1550.0	30.0	3.6	1.5		
	2800	OTTA	24P	R	1550.0		180.0	3.6			
	2800	OTTA	20	GRF	1755.0	1805.0	20.0	2.8	1.4		
	2800	OTTA	26	FAL	1850.0	1930.0	40.0	-3.6	-1.5		
	410	SGMR	4	S/F	2037.5	2037.8	4.3	27.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	2038.0	2039.6	2.8	139.0			QL=6 ST=2 TYP=5
	8800	SGMR	8	S	2041.3	2041.3	1.2	22.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	2300.0	2301.7	10.0	31.0	12.0		
	2840	PEKG	3	S	2300.0	2301.7	6.0	17.7	8.6		
	3750	TYKW	5	S	2324.0	2325.2	3.0	2.0	.7		
28	100	GORK	44	NS	0252.0E		420.0D		20.0		
	127	TORN	44	NS	0600.0E		522.0D		19.0		V1,DISTURBED
	204	IZMI	44	NS	0600.0E		360.0D	250.0			
	610	LEAR	43	NS	0605.1	0605.1	54.9	20.0			QL=6 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
28	260	ONDR	44	NS	0707.0E	0936.0U	424.0D	26.0U			
	245	SGMR	43	NS	1025.0	2012.1	759.0D	239.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	1025.0	2150.6	759.0D	160.0			QL=6 ST=3 TYP=1
	410	PALE	43	NS	1658.0	2010.3	272.0D	34.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1658.0	2011.1	272.0D	250.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	2004.0E	2040.0	240.0D	140.0	55.0		WL
	200	HIRA	44	NS	2004.0E	2044.0	785.0D	80.0	27.0		ML
	208	VORO	44	NS	2200.0E		300.0D		25.0		
	410	LEAR	43	NS	2254.0	0413.3	662.0D	160.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2254.0	0817.3	662.0D	370.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0058.0	0123.0	50.0	3.0	1.5		INTERFERENCE
	500	HIRA	24	R	0131.2	0440.4	450.0D	30.0	15.0		SL
	245	LEAR	47	GB	0143.1	0143.1	.7	169.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0143.1	0143.3	1.0	75.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0207.0	0234.0	60.0	5.0	2.0		
	9400	TYKW	20	GRF	0227.0	0231.0	30.0	4.0	2.0		
	9100	GORK	20	GRF	0300.0E	0643.8	310.0D	24.0			
	950	GORK	22	GRF	0304.0E	0603.0	194.0D	15.0			
	650	GORK	22	GRF	0305.0E	0602.8	525.0D	20.0			
	2950	GORK	22	GRF	0312.0	0321.0	399.0	22.0			
	3750	TYKW	21	GRF	0313.0	0336.0	196.0	7.0	3.0		
	2000	TYKW	21	GRF	0314.0	0338.0	60.0	6.0	3.0		
	9400	TYKW	20	GRF	0317.0	0340.0	85.0	4.0U	2.0U		RAIN
	2000	TYKW	45	C	0319.0	0321.6	12.0	5.0	1.5		
	1000	TYKW	21	GRF	0320.0	0500.0	200.0	2.0	1.0		
	1000	TYKW	5	S	0321.0	0321.4	1.5	1.5	.5		
	1000	TYKW	45	C	0333.0	0337.4	6.0	12.0	1.0		
	2000	TYKW	20	GRF	0430.0	0520.0	120.0	2.0	1.0		
	9400	TYKW	20	GRF	0445.0	0510.0	65.0	4.0	2.0		
	3750	TYKW	5	S	0447.0	0454.0	18.0	2.0	1.0		
	3750	TYKW	20	GRF	0507.0	0509.0	450.1	3.0	1.0		
	410	LEAR	47	GB	0517.0	0517.5	.8	260.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	0521.5	0522.2	2.5	2.0	.7		
	610	LEAR	8	S	0601.8	0603.5	2.0	17.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0603.0	0605.3	18.0D	9.0D	2.0D		
	410	LEAR	47	GB	0614.8	0615.0	.3	300.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0641.0	0643.2	18.0	7.0	2.5		
	8800	LEAR	4	S/F	0641.8	0644.0	7.2	11.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0642.0	0643.2	5.0	1.5	.5		
	9400	TYKW	20	GRF	0642.0	0644.0	50.0	4.0	2.0		
	2695	LEAR	4	S/F	0642.1	0643.0	6.7	10.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0642.1	0643.0	6.7	10.0			QL=6 ST=2 TYP=3
	536	ONDR	40	F	0707.0E	1050.0U	352.0D	21.0U			
	6100	KISV	1	S	1058.8	1059.4	1.5	6.0			
	2800	OTTA	27A	RF	1145.0		190.0	3.6	3.3		
	2800	OTTA	24	R	1145.0	1155.0	10.0	3.6	1.8		
	2800	OTTA	24P	R	1155.0		160.0	3.6			
	2800	OTTA	2	S/F	1234.0	1235.6	1.5	5.8	2.9		
	410	SGMR	49	GB	1234.6	1234.8	1.5	560.0			QL=6 ST=2 TYP=6
	9400	HUAN	20	GRF	1357.2	1417.0	41.5	3.4	1.4		0
	2800	OTTA	26	FAL	1435.0	1455.0	20.0	-3.6	-1.8		
	2800	OTTA	20	GRF	1510.0	1530.0	120.0	3.6	1.8		
	2800	OTTA	1	S	1743.0	1744.0	3.0	5.2	2.0		
	410	PALE	49	GB	1801.8	1803.1	2.8	1600.0			QL=6 ST=2 TYP=6
	15400	PALE	8	S	1801.8	1803.6	1.8	18.0			QL=6 ST=2 TYP=3
	610	PALE	49	GB	1802.0	1803.1	1.8	500.0			QL=6 ST=3 TYP=6
	245	PALE	47	GB	1802.0	1803.1	2.6	390.0			QL=6 ST=2 TYP=5
	2800	OTTA	45	C	1802.0	1803.2	2.5	8.0	2.6		
	1415	PALE	47	GB	1802.1	1803.1	2.2	53.0			QL=6 ST=2 TYP=5
	2800	OTTA	240	R	1855.0	1925.0	30.0	2.8	1.4		
	9400	HUAN	20	GRF	1953.7	2012.2	30.4	6.0	3.2		0
	9400	HUAN	1	S	2039.5	2041.5	4.3	5.1	3.4		0
	2800	OTTA	21	GRF	2125.0	2245.0	110.0	4.6	2.8		
	3750	TYKW	21	GRF	2135.0	2244.0	125.0	8.0	4.0		
	2000	TYKW	21	GRF	2140.0	2240.0	180.0	4.0	2.0		
	1000	TYKW	5	S	2149.0	2149.3	1.0	105.0	23.0		
	2800	OTTA	45	C	2149.0	2150.8	3.0	10.4	3.4		
	1000	TYKW	45	C	2150.0	2150.9	1.5	405.0	85.0		
	9400	TYKW	5	S	2150.3	2150.8	1.0	16.0	5.0		
	3750	TYKW	5	S	2150.3	2150.8	1.0	14.0	4.0		
	2000	TYKW	45	C	2150.4	2150.7	1.0	28.0	9.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
28	410	SGMR	47	GB	2150.5	2150.6	1.3	500.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	2150.5	2150.8	1.5	239.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	2150.6	2150.8	1.2	180.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	2154.0	2154.5	2.0	6.0	1.5		
	245	LEAR	47	GB	2257.6	2258.6	3.0	100.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	2258.0	2258.7	2.0	39.0	7.0		
	3750	TYKW	5	S	2258.0	2258.7	2.0	20.0	4.0		
	1000	TYKW	45	C	2258.0	2258.8	2.0	325.0	47.0		
	410	LEAR	49	GB	2258.1	2258.3	2.5	6400.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	2258.1	2258.3	5.9D	3800.0			QL=6 ST=2 TYP=6
	2695	PENT	45	C	2258.2	2258.7	3.5	16.0	4.4		
	9400	TYKW	5	S	2258.3	2258.6	1.0	17.0	5.0		
	610	SGMR	47	GB	2258.3	2258.6	5.7D	98.0			QL=6 ST=2 TYP=5
	245	SGMR	4	S/F	2258.8	2300.1	5.2D	38.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2300.0	2300.5	1.5	445.0	60.0		
	3750	TYKW	5	S	2300.0	2300.5	2.0	10.0	2.0		
	2000	TYKW	5	S	2300.0	2300.5	1.5	32.0	5.0		
	9400	TYKW	5	S	2300.0	2300.5	1.0	11.0	3.0		
	3750	TYKW	5	S	2348.0	2356.0	25.0	3.0	1.5		
	100	HIRA	46	C	2348.5	2349.0	4.0	700.0	188.0		WL
	200	HIRA	46	C	2348.8	2349.7	1.7	870.0	223.0		WL
	245	LEAR	49	GB	2348.8	2350.1	2.0	610.0			QL=6 ST=2 TYP=6
	9400	TYKW	20	GRF	2349.0	2356.0	30.0	5.0	2.0		
	2000	TYKW	5	S	2349.6	2349.7	.6	2.5	1.0		
	410	LEAR	49	GB	2353.1	2354.1	1.2	1100.0			QL=6 ST=2 TYP=6
	1000	TYKW	5	S	2353.9	2354.2	.6	88.0	6.0		
	245	LEAR	47	GB	2354.0	2354.1	.1	55.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	2354.0	2354.1	.1	70.0			QL=6 ST=2 TYP=5
	2000	TYKW	8	S	2354.0	2354.1	.3	3.0	1.0		
	610	LEAR	8	S	2354.0	2354.1	.3	11.0			QL=6 ST=2 TYP=3
29	610	LEAR	43	NS	0303.8	0416.5	412.2D	35.0			QL=6 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D	150.0			
	127	TORN	43	NS	0620.0		240.0		4.0		V1
	260	ONDR	44	NS	0722.0E		400.0D				
	410	SGMR	43	NS	1025.0	1310.0	758.0D	30.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1025.0	1730.5	758.0D	169.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1720.8	1730.5	654.2D	270.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1721.0	2025.8	654.0D	42.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D		7.0		
	200	HIRA	44	NS	2333.0E	0502.0	575.0D	20.0	8.0		ML
	3750	TYKW	20	GRF	0135.0	0148.0	50.0	3.0	1.5		
	2000	TYKW	21	GRF	0240.0	0540.0	280.0	5.0	2.5		
	610	LEAR	8	S	0241.3	0241.6	.5	17.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0244.0	0256.0	40.0	4.0	2.0		
	610	LEAR	8	S	0244.0	0244.1	.1	16.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0250.0	0251.5	5.0	8.0	3.0		
	1000	TYKW	5	S	0250.0	0251.6	4.0	1.5	.5		
	2000	TYKW	21	GRF	0250.0	0256.0	35.0	4.0	2.0		
	1000	TYKW	21	GRF	0250.0	0520.0	260.0	3.0	1.5		
	3750	TYKW	5	S	0250.5	0252.0	4.5	3.0	1.0		
	610	LEAR	47	GB	0300.6	0300.8	1.2	100.0			QL=6 ST=2 TYP=5
	9100	GORK	20	GRF	0303.0E	0551.9	382.0D	20.0			
	950	GORK	23	GRF	0303.0	0427.0	387.0	12.0			
	650	GORK	21	GRF	0304.0E	0505.0	386.0D	13.0			
	1000	TYKW	5	S	0306.0	0306.7	1.0D	2.0	1.0D		
	950	GORK	1	S	0306.2	0306.7	1.2	2.0			
	500	HIRA	8	S	0314.6	0314.6	.2	14000.0			ML
	410	LEAR	47	GB	0314.8	0315.0	3.0	70.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0314.8	0315.0	2.3	119.0			QL=6 ST=2 TYP=5
	1000	TYKW	8	S	0314.9	0315.0	.2	27.0	7.0		
	1415	LEAR	8	S	0315.0	0315.1	.1	18.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0316.0	0316.6	1.5	3.0	.7		
	500	HIRA	8	S	0316.3	0316.3	.4	500.0			WR
	1000	TYKW	45	C	0319.0	0323.3	15.0	2.0	.7		
	2950	GORK	20	GRF	0319.5	0509.0	386.0D	12.4			
	9400	TYKW	20	GRF	0337.0	0510.0	200.0	8.0	4.0		
	3750	TYKW	21	GRF	0340.0	0540.0	220.0	10.0	5.0		
	500	HIRA	46	C	0345.3	0345.6	1.0	240.0	50.0		WR
	610	LEAR	8	S	0345.3	0347.3	2.0	23.0			QL=6 ST=3 TYP=3
	3750	TYKW	5	S	0345.4	0346.2	1.5	6.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
29	410	LEAR	47	GB	0345.5	0345.6	1.6	210.0			QL=6 ST=2 TYP=5
	950	GORK	2	S/F	0345.5	0346.0	1.2	25.0			
	2000	TYKW	5	S	0345.5	0346.1	1.5	4.0	1.5		
	200	HIRA	8	S	0345.6	0346.0	.5	330.0			WL
	1000	TYKW	45	C	0345.6	0346.2	3.0	42.0	4.0		
	245	LEAR	49	GB	0345.8	0346.0	1.3	720.0			QL=6 ST=2 TYP=6
	1000	TYKW	5	S	0354.0	0355.2	2.5	2.0	.7		
	1000	TYKW	45	C	0413.0	0416.5	11.0	36.0	1.0		
	6100	KISV	2	S/F	0550.2	0550.7	1.0	8.0			
	536	ONDR	8	S	0800.9	0801.0	.2	13.0			
	536	ONDR	4	S/F	0826.3	0826.5	1.3	22.0	21.0		
	33	UPIC	46	C	0954.4	0955.4	2.8				
	29	UPIC	46	C	0954.4	0955.5	2.8				
	9400	HUAN	1	S	1144.6	1146.5	3.1	10.2	2.4		R
	1470	POTS	3	S	1235.2	1235.5	2.8	14.0			
	1470	POTS	8	S	1251.5	1251.8	.8	6.5			
	2800	OTTA	27A	RF	1450.0		430.0	3.2	2.7		
	2800	OTTA	24	R	1450.0	1550.0	60.0	3.2	1.6		
	2800	OTTA	24P	R	1550.0		290.0	3.2			
	410	SGMR	8	S	1647.0	1647.8	1.5	30.0			QL=6 ST=2 TYP=3
	245	SGMR	49	GB	1647.6	1647.8	1.5	890.0			QL=6 ST=2 TYP=6
	2800	OTTA	21	GRF	1720.0	1800.0	140.0	7.2	3.6		
	9400	HUAN	21	GRF	1733.7	1756.0	50.2	13.7	9.6		R
	8800	PALE	4	S/F	1741.8	1744.3	3.8	27.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	1742.0	1744.2	3.3	15.4	5.8		R
	15400	PALE	8	S	1743.6	1744.3	1.7	29.0			QL=6 ST=2 TYP=3
	2800	OTTA	40	F	1743.7	1749.5	10.0	5.6			
	4995	PALE	8	S	1743.8	1744.3	1.5	19.0			QL=6 ST=2 TYP=3
	9400	HUAN	2	S/F	1746.6	1749.5	3.9	12.0	7.7		0
	8800	PALE	4	S/F	1746.8	1748.8	3.0	20.0			QL=6 ST=2 TYP=3
	15400	PALE	4	S/F	1747.1	1749.5	3.2	26.0			QL=6 ST=2 TYP=3
	2800	OTTA	26	FAL	2040.0	2200.0	80.0	-3.2	-1.6		
	3750	TYKW	5	S	2227.0	2228.5	4.0	3.0	1.0		
30	410	LEAR	43	NS	0105.0	0339.6	531.0D	48.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	0205.0	0458.3	471.0D	169.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0559.0E	0823.0U	480.0D	12.0			
	245	SGMR	43	NS	1027.0	1324.3	754.0D	139.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	1027.0	1737.3	754.0D	87.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1646.0	0345.5	689.0D	520.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1646.0	1727.3	689.0D	66.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2200.0E		300.0D		12.0		
	245	LEAR	43	NS	2252.0	0345.6	664.0D	360.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	2252.0	2311.1	664.0D	30.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	2354.0E	0220.0	552.0D	10.0	6.0		WL
	3750	TYKW	5	S	0117.0	0119.3	5.0	3.0	1.0		
	410	LEAR	8	S	0123.3	0123.3	1.0	19.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0210.0	0212.6	3.0	5.0	1.5		
	1000	TYKW	45	C	0210.0	0212.7	4.0	6.0	1.5		
	3750	TYKW	45	C	0210.0	0212.7	6.0	6.0	1.5		
	2000	TYKW	21	GRF	0210.0	0255.0	170.0	3.0	1.5		
	3750	TYKW	45	C	0241.0	0242.5	3.0	3.0	1.0		
	2000	TYKW	5	S	0241.5	0242.6	2.0	3.0	1.0		
	1000	TYKW	5	S	0242.0	0242.6	2.0	1.5	.5		
	3750	TYKW	20	GRF	0248.0	0256.0	40.0	3.0	1.5		
	500	HIRA	22	GRF	0331.0	0404.0	210.0	15.0	6.0		SL
	3750	TYKW	20	GRF	0345.0	0400.0	60.0	2.0	1.0		
	410	PALE	47	GB	0353.3	0353.8	2.0	56.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0419.5	0419.8	1.1	80.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0640.0	0710.0	80.0	4.0	2.0		
	2000	TYKW	20	GRF	0640.0	0720.0	100.0	3.0	1.5		
	2800	OTTA	20	GRF	1220.0	1300.0	130.0	3.6	1.8		
	930	BORD	41	F	1254.0	1254.3	.6	30.0	2.0		
	9400	HUAN	20	GRF	1321.5	1356.0	56.1	2.6	1.2		0
	234	POTS	4	S/F	1324.1	1324.4	.9	200.0	20.0		
	930	BORD	41	F	1352.6	1352.6	.3	21.0	2.0		
	930	BORD	41	F	1504.0	1504.4	.4	24.0	2.0		
	410	PALE	47	GB	1737.8	1738.5	1.3	72.0			QL=6 ST=2 TYP=5
	9400	HUAN	20	GRF	1757.5	1807.0	13.9	10.3	3.4		0
	2800	OTTA	20	GRF	1950.0	1954.0	37.0	4.0	1.9		
	9400	HUAN	1	S	1951.9	1953.5	5.9	6.8	2.9		L

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
30	9400	HUAN	8	S	2034.7	2035.2	1.0	18.8	6.8		L
	1000	TYKW	5	S	2124.6	2124.7	.7	2.0	.5		
	9400	TYKW	45	C	2236.0	2236.4	3.0	8.0	2.0		
	3750	TYKW	20	GRF	2357.0	0006.0	35.0	5.0	1.5		
	2000	TYKW	5	S	2358.0	0008.0U	2.0	3.0D	1.5D		
	1000	TYKW	45	C	2359.0	0008.0	19.0	6.0	2.0		
31	204	IZMI	43	NS	0600.0		260.0	35.0			
	260	ONDR	44	NS	0614.0E	1254.0U	478.0D	44.0U			
	127	TORN	43	NS	0846.0	0858.2	90.0	10.0	1.0		VO
	410	SGMR	43	NS	1028.0	1240.1	751.0D	26.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1028.0	1309.0	751.0D	180.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1645.0	2016.3	692.0D	97.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	2005.0E	0100.0	780.0D	30.0	6.0		ML
	245	LEAR	43	NS	2251.0	0003.1	666.0D	67.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	2308.8	2309.1	648.2D	25.0			QL=6 ST=2 TYP=1
	1000	TYKW	30	PBI	0018.0		40.0	1.5	.7		
	1000	TYKW	8	S	0036.9	0037.0	.2	6.0	2.0		
	1000	TYKW	45	C	0104.0	0105.4	4.0	2.5	.5		
	1000	TYKW	45	C	0112.4	0112.7	2.0	6.0	1.0		
	1000	TYKW	45	C	0117.0	0117.3	2.0	7.0	1.5		
	3750	TYKW	21	GRF	0140.0	0205.0	60.0	10.0	4.0		
	1415	LEAR	47	GB	0141.8	0150.6	11.2	55.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	0143.0	0148.5	17.0	26.0	7.0		
	1000	TYKW	45	C	0144.0	0152.2U	45.0	13.0D	1.5D		
	8800	LEAR	4	S/F	0144.3	0148.8	5.3	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0145.0	0205.0	45.0	11.0	5.0		
	500	HIRA	46	C	0146.6	0152.6	7.0	15.0	6.0		ML
	610	LEAR	4	S/F	0146.8	0148.6	6.8	33.0			QL=6 ST=3 TYP=3
	3750	TYKW	45	C	0147.0	0148.1	15.0	15.0	3.0		
	9400	TYKW	45	C	0147.0	0148.6	10.0	6.0	2.0		
	2695	LEAR	47	GB	0147.1	0148.8	3.2	80.0			QL=6 ST=2 TYP=5
	610	PALE	4	S/F	0148.0	0148.3	5.8	31.0			QL=6 ST=2 TYP=3
	2695	PENT	40	F	0148.0	0148.5	1.0	65.0			
	2695	PALE	47	GB	0148.0	0148.8	1.8	74.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0148.0	0150.3	5.0	31.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0149.3	0149.5	1.2	139.0			QL=6 ST=2 TYP=5
	500	HIRA	3	S	0156.0	0156.8	2.0	10.0	6.0		ML
	610	LEAR	47	GB	0156.3	0157.1	2.3	69.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	0156.6	0157.1	1.2	16.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0156.6	0157.1	2.2	87.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	0156.6	0157.3	3.0	82.0			QL=6 ST=2 TYP=5
	2000	TYKW	29	PBI	0200.0		80.0	5.0	2.0		
	208	VORO	4	S/F	0255.0	0257.0	5.0	200.0D			
	9395	PEKG	20	GRF	0304.0	0307.5	56.0	6.5	2.8		
	15400	LEAR	4	S/F	0304.3	0307.0	3.5	13.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0305.1	0306.6	2.5	47.0			QL=6 ST=2 TYP=3
	17000	NOBE	20	GRF	0305.2	0307.2	16.0	19.0			0
	2840	PEKG	20	GRF	0306.0	0307.5	54.0	3.1	1.9		
	610	LEAR	4	S/F	0316.0	0316.1	4.3	35.0			QL=6 ST=2 TYP=3
	950	GORK	23	GRF	0327.0E	0539.0	474.0D	11.0			
	3750	TYKW	45	C	0502.0	0510.2	40.0	18.0	11.0		
	2000	TYKW	45	C	0503.0	0520.7	30.0	21.0	10.0		
	2840	PEKG	40	F	0503.0	0520.6	42.0D	26.9	9.8		
	4995	ATHN	4	S/F	0506.1	0510.3	19.7	21.0			QL=6 ST=2 TYP=3
	3100	CRIM	1	S	0507.0	0510.0	7.0	10.0	3.0		
	9395	PEKG	20	GRF	0507.0	0520.0	126.0	27.4	10.2		
	9400	TYKW	28	PRE	0508.0	0510.0	10.0	8.0	5.0		
	9100	GORK	21	GRF	0508.0	0618.1	264.0	20.0			
	2695	LEAR	20	GRF	0508.8	0520.6	18.7	39.0			QL=6 ST=2 TYP=2
	1415	LEAR	20	GRF	0509.0	0520.5	18.5	16.0			QL=6 ST=2 TYP=2
	2950	GORK	22	GRF	0509.0E	0520.6	318.0D	23.0			
	4995	LEAR	20	GRF	0509.0	0521.8	18.5	20.0			QL=6 ST=2 TYP=2
	6100	KISV	46	C	0512.0E	0520.7	60.0D	17.0			
	1000	TYKW	45	C	0513.0	0520.7	17.0	50.0	9.0		
	9400	TYKW	45	C	0518.0	0520.6	8.0	36.0	16.0		
	9100	GORK	1	S	0518.6	0520.6	4.0	23.0	12.0		
	950	GORK	46	C	0518.8	0520.6	10.0	26.0			
	8800	LEAR	4	S/F	0518.8	0520.6	8.7	33.0			QL=6 ST=2 TYP=3
	950	GORK			0518.8	0523.7		8.5			
	15400	LEAR	4	S/F	0520.3	0520.6	2.7	17.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
31	9400	TYKW	30	PBI	0526.0		160.0	12.0	6.0		
	9400	TYKW	5	S	0528.0	0534.0	20.0	4.0	2.0		
	1000	TYKW	29	PBI	0530.0		80.0	4.0	2.0		
	2000	TYKW	30	PBI	0533.0		140.0	12.0	6.0		
	3750	TYKW	30	PBI	0542.0		150.0	8.0	4.0		
	2000	TYKW	45	C	0552.0	0555.0	10.0	3.0	1.0		
	2000	TYKW	21	GRF	0552.0	0618.0	60.0	4.0	2.0		
	3750	TYKW	20	GRF	0555.0	0619.0	75.0	9.0	4.0		
	9400	TYKW	20	GRF	0600.0	0615.0	80.0	15.0	6.0		
	15400	LEAR	20	GRF	0605.8	0615.1	16.2	19.0			QL=6 ST=2 TYP=2
	6100	KISV	29	PBI	0612.0	0613.0	110.0	15.0			
	2000	TYKW	5	S	0622.0	0623.5	6.0	2.5	1.0		
	1000	TYKW	5	S	0719.0	0719.3	1.0	5.0	1.5		
	610	LEAR	4	S/F	0734.0	0735.6	2.1	19.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0816.0	0816.6	2.0	21.0	5.0		
	930	BORD	8	S	1006.3	1006.3	.1	29.0	1.0		
	2800	OTTA	20	GRF	1220.0	1250.0	95.0	2.8	1.6		
	930	BORD	41	F	1251.5	1253.0	1.8	36.0	2.0		
	930	BORD	41	F	1418.0	1418.9	3.6	41.0	2.0		
	930	BORD	8	S	1430.2	1430.3	.1	24.0	1.0		
	2800	OTTA	23	GRF	1600.0	1955.0	490.0	20.0			
	2800	OTTA	1	S	1721.0	1723.0	7.5	7.0	3.2		
	8800	SGMR	4	S/F	1721.1	1723.1	5.9	26.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1721.1	1723.1	2.0	13.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1722.8	1723.1	1.3	20.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	2240.0	2310.0	100.0	4.0	2.0		
	2000	TYKW	20	GRF	2300.0	2316.0	55.0	2.0	1.0		
	3750	TYKW	20	GRF	2300.0	2316.0	55.0	2.0	1.0		
	9400	TYKW	45	C	2355.0	2356.0	3.0	7.0	2.5		

Reports are received routinely from the following observatories:

ATHN = Athens	HUAN = Huancayo	NOBE = Nobeyama	SYDN = Sydney
BERN = Berne	IRKU = Irkutsk	ONDR = Ondrejov	TORN = Torun
BORD = Bordeaux	IZMI = IZMIRAN	OTTA = Ottawa	TYKW = Toyokawa
CRIM = Crimea	KISV = Kislovodsk	PALE = Palehua	YUNN = Yunnan
DWIN = Dwingeloo	KRAK = Krakow	PEKG = Peking	TRST = Triste
GORK = Gorky	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HARS = Harestua	MANI = Manila	SAOP = Sao Paulo	VORO = Voroshilov
HIRA = Hiraiso	NAGO = Nagoya	SGMR = Sagmore Hill	

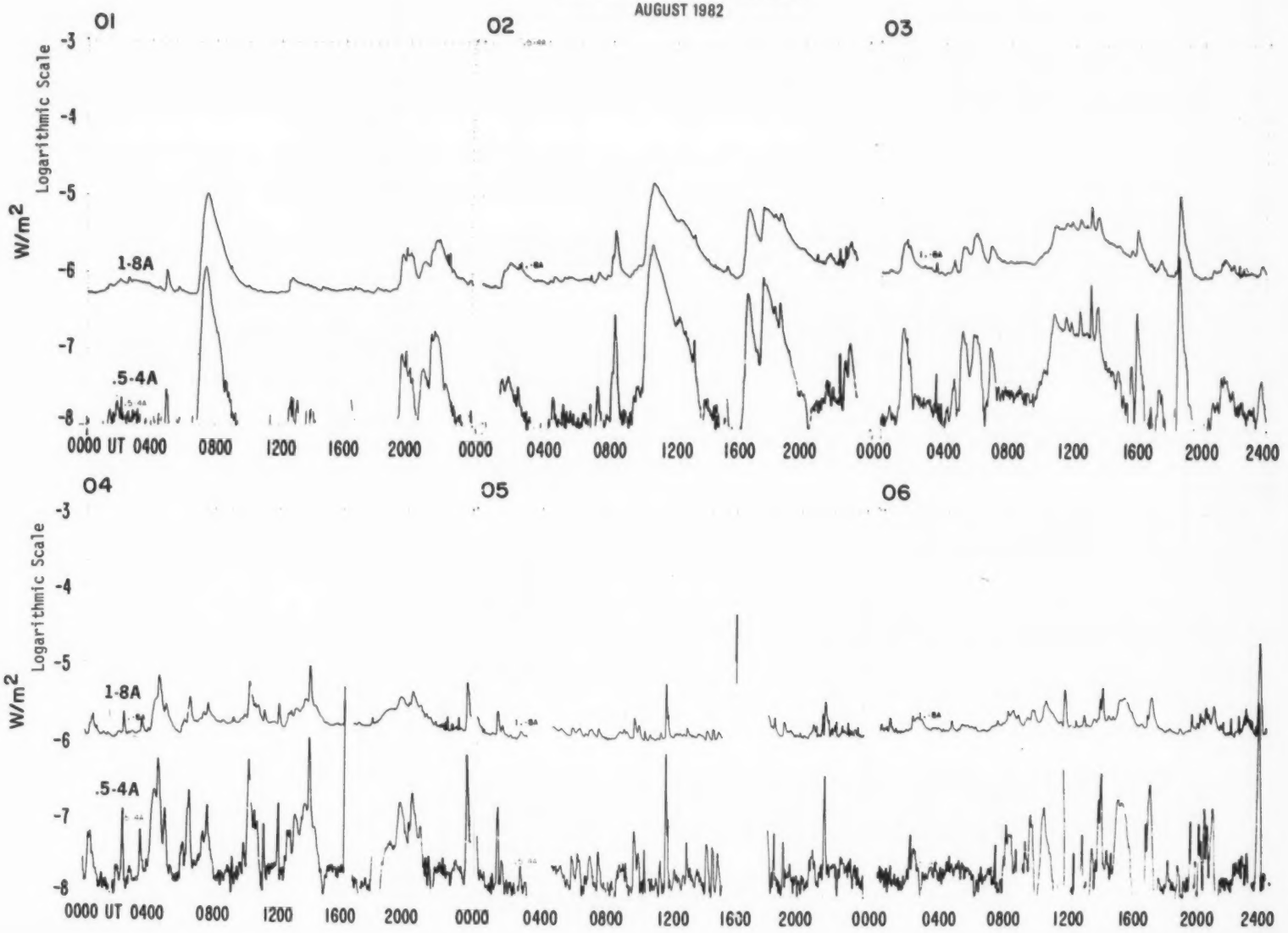
Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
				49 Major +

1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	240 Rise only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	240F Rise only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	24P Post Rise	26F Fall F	32A Absorption A
			46F Complex F

SMS-GOES X-RAYS

AUGUST 1982



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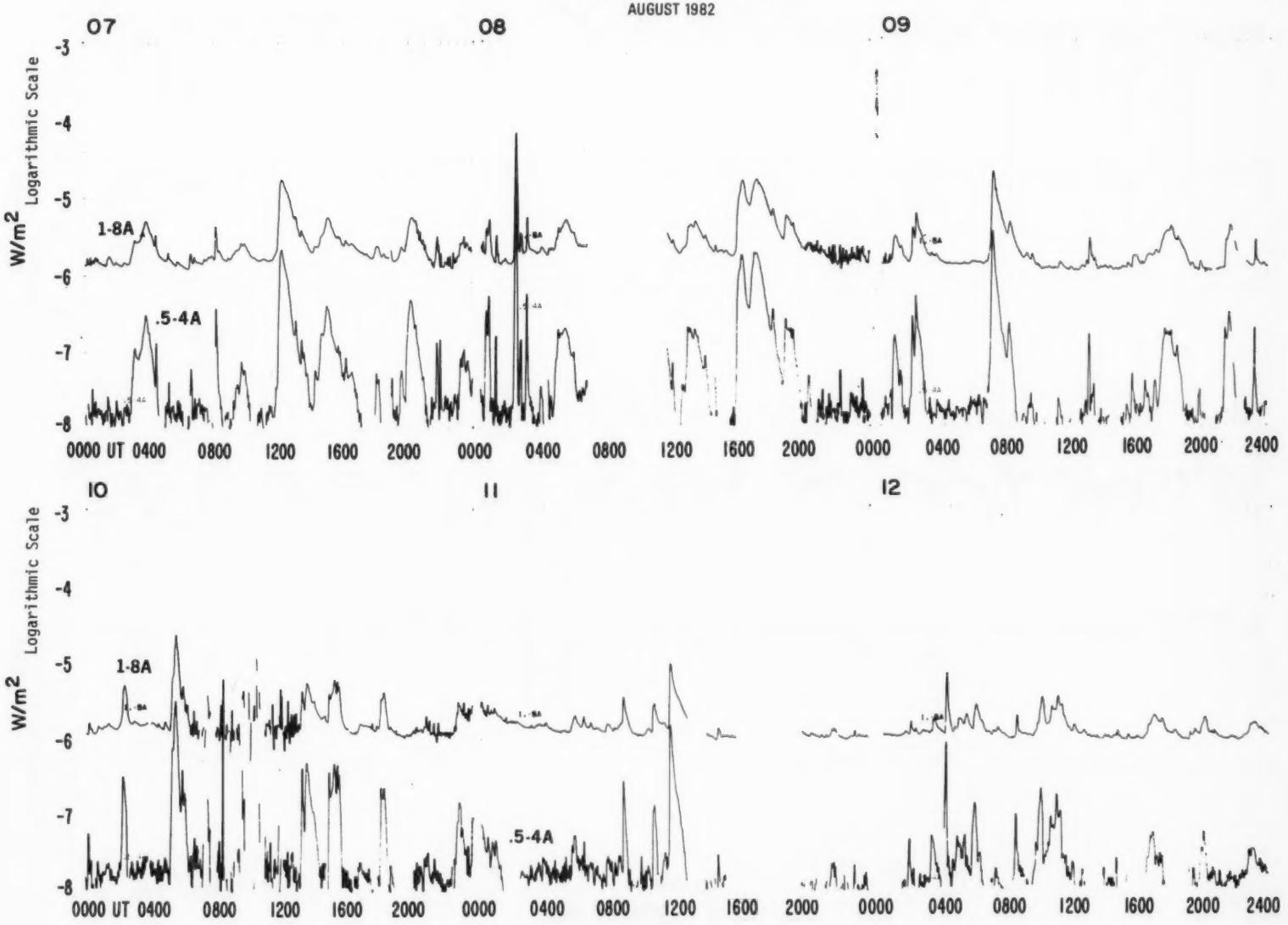
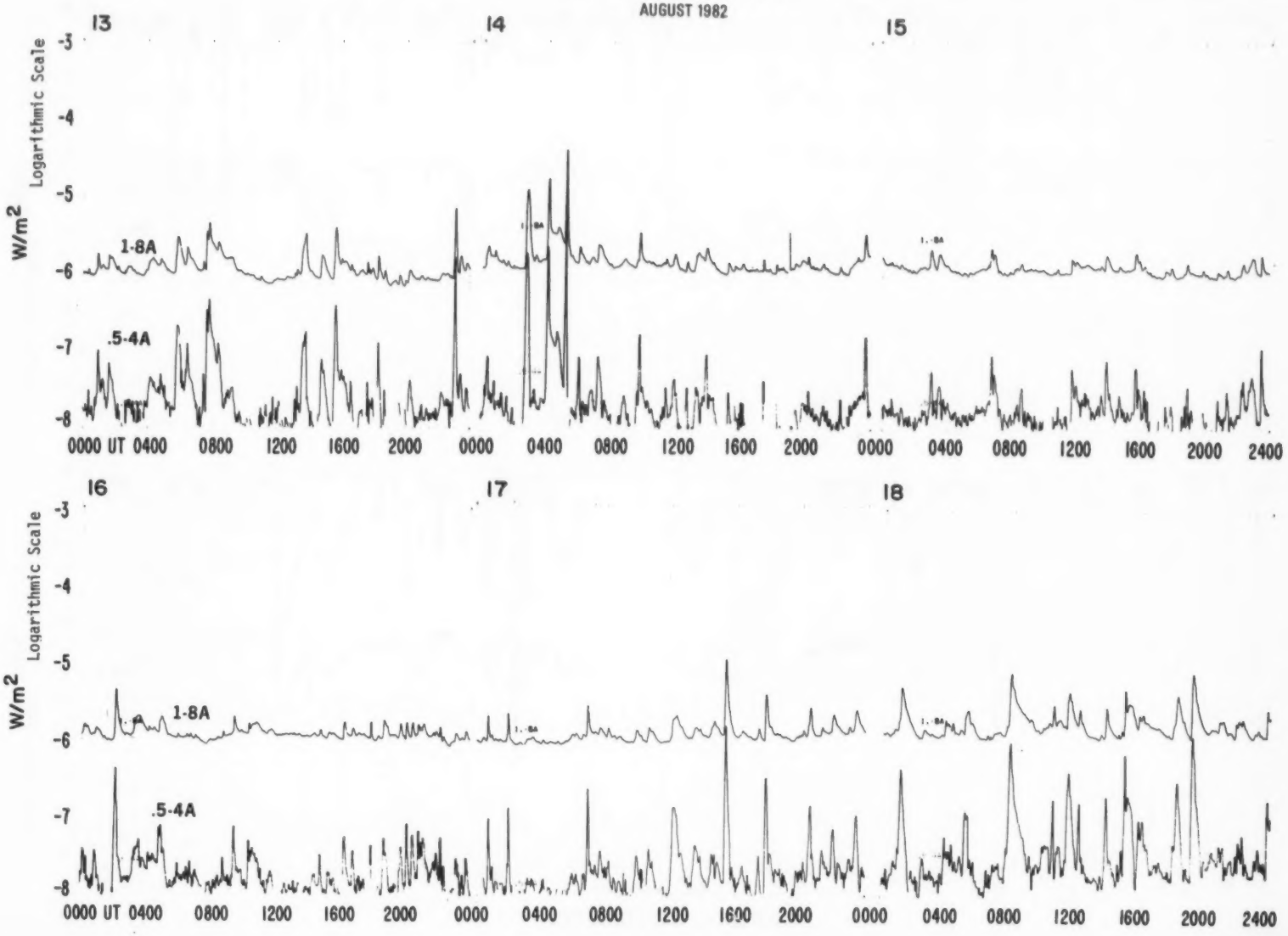
SMS-GOES X-RAYS

AUGUST 1982



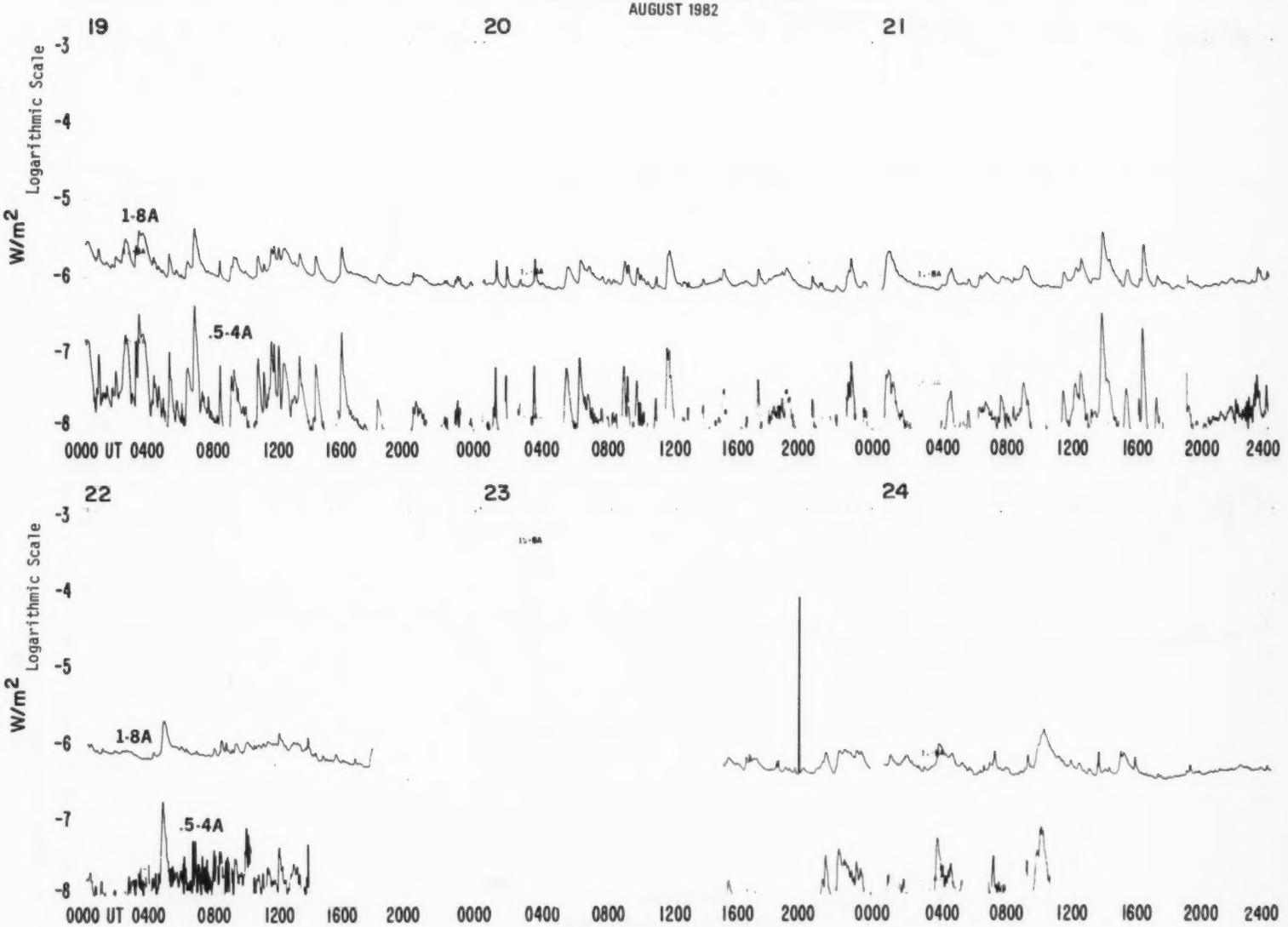
SMS-GOES X-RAYS

AUGUST 1982



SMS-GOES X-RAYS

AUGUST 1982



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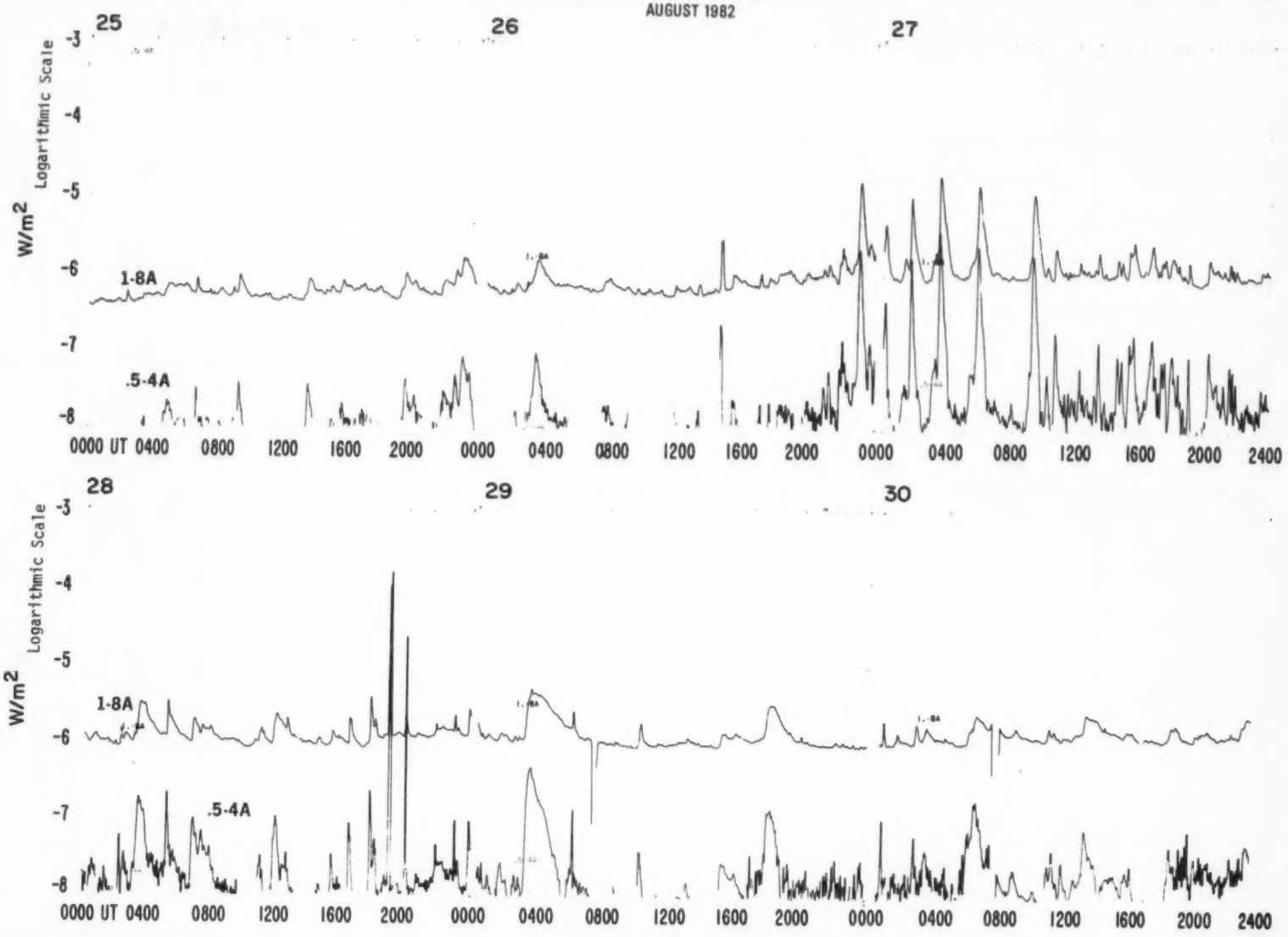
AUGUST 1982



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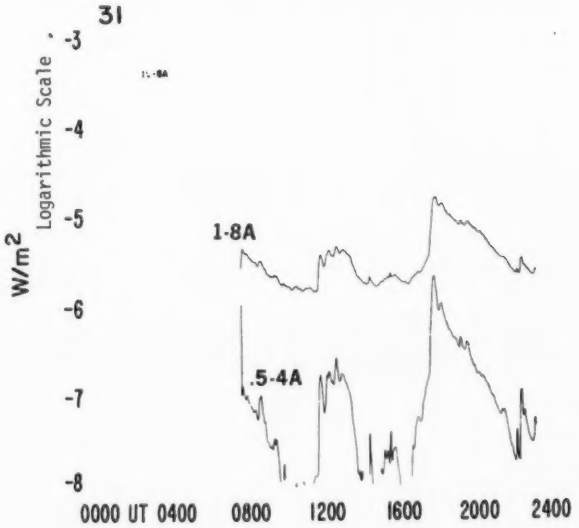
SMS-GOES X-RAYS

AUGUST 1982



MASS EJECTIONS FROM THE SUN

August 1982

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
CULG	Aug 01	0706.5		0720.0			Meter	II Herringbone
WEND	Aug 02	0801		0806D	083	0.99-1.04	H-alpha	SP
KHAR	Aug 06	0730E		0736D	066	1.00	H-alpha	S
KHAR	Aug 06	0830E		0925D	251	0.74	H-alpha	S
LEAR	Aug 06	2333.9		2338.1			Meter	II
CULG	Aug 06	2334.0		2339.5			Meter	II
CULG	Aug 08	0022.0		0025.5			Meter	II
PALE	Aug 08	0202.0		0215.9			Meter	II
CULG	Aug 08	0205.0		0220.0			Meter	II Herringbone
LEAR	Aug 08	0206.8		0213.2			Meter	II
KHAR	Aug 09	0935E	0954	1005D	259	1.00	H-alpha	S
KHAR	Aug 10	0749E		0811D	300	0.07	H-alpha	S
KHAR	Aug 10	0819E		0828D	300	0.07	H-alpha	S
KHAR	Aug 11	0820E		0930D	046	0.51	H-alpha	S
KHAR	Aug 11	0950E		1000D	272	0.37	H-alpha	S
KHAR	Aug 11	1006E		1030D	245	0.87	H-alpha	S
WEND	Aug 12	1631	1647	1706D	282	0.96	H-alpha	SP
KHAR	Aug 13	0754E		0845D	278	0.76	H-alpha	S
KHAR	Aug 13	1021		1027D	120	0.60	H-alpha	S
CULG	Aug 13	2305.0		2306.5			Meter	Possible II
WEIS	Aug 14	0511.5		0523.3			Meter	II
CULG	Aug 14	0512.0		0536.5			Meter	II
ABST	Aug 15	0646E	0704	0730D	285	0.97	H-alpha	SP
KHAR	Aug 16	0747E		0752D	279	0.88	H-alpha	S
KHAR	Aug 16	0748E		0752D	190	0.36	H-alpha	S
KHAR	Aug 16	0950E		0956D	277	1.00	H-alpha	S
KHAR	Aug 16	0952E		1006D	208	0.33	H-alpha	S
HARV	Aug 17	1520.0		1527.0			Meter	II
WEIS	Aug 17	1520.1		1525.2			40-150 MHz	II Harmonic
HARV	Aug 17	1528.0		1529.0			Meter	IV
ABST	Aug 18	0618E	0705	0705D	255	1.00	H-alpha	SP
KHAR	Aug 18	0738E		0800D	278	1.00	H-alpha	S
KHAR	Aug 18	0756E		0803D	100	1.00	H-alpha	S
KHAR	Aug 18	0812E		0840D	257	0.80	H-alpha	S
KHAR	Aug 18	0815E		0845D	104	0.98	H-alpha	S
KHAR	Aug 18	1000E		1027D	100	1.00	H-alpha	S
KHAR	Aug 18	1018E		1033D	102	1.00	H-alpha	S
WEND	Aug 18	1129	1132	1141	104	0.98-1.02	H-alpha	S
WEND	Aug 18	1517	1520	1541	104	0.98-1.04	H-alpha	S
WEND	Aug 18	1517	1536	1541	104	0.98-1.04	H-alpha	S
KHAR	Aug 20	0800E		0850D	283	1.00	H-alpha	S
KHAR	Aug 20	0848E		0850D	015	0.49	H-alpha	S
KHAR	Aug 20	0900E		0918D	112	0.76	H-alpha	S
KHAR	Aug 20	0913E		0930D	283	1.00	H-alpha	S
KHAR	Aug 20	1048E		1100D	112	0.76	H-alpha	S
KHAR	Aug 20	1048E		1100D	259	0.96	H-alpha	S
KHAR	Aug 21	0822E		0907D	073	0.84	H-alpha	S
KHAR	Aug 21	0905E		0945D	264	0.87-0.98	H-alpha	S
WEND	Aug 26	0751	0821	0844	265	1.00-1.25	H-alpha	Q or SP
KHAR	Aug 26	0802E		0835D	264	1.10	H-alpha	S
KHAR	Aug 26	0837E		0845D	244	0.57	H-alpha	S

MASS EJECTIONS FROM THE SUN

August 1982

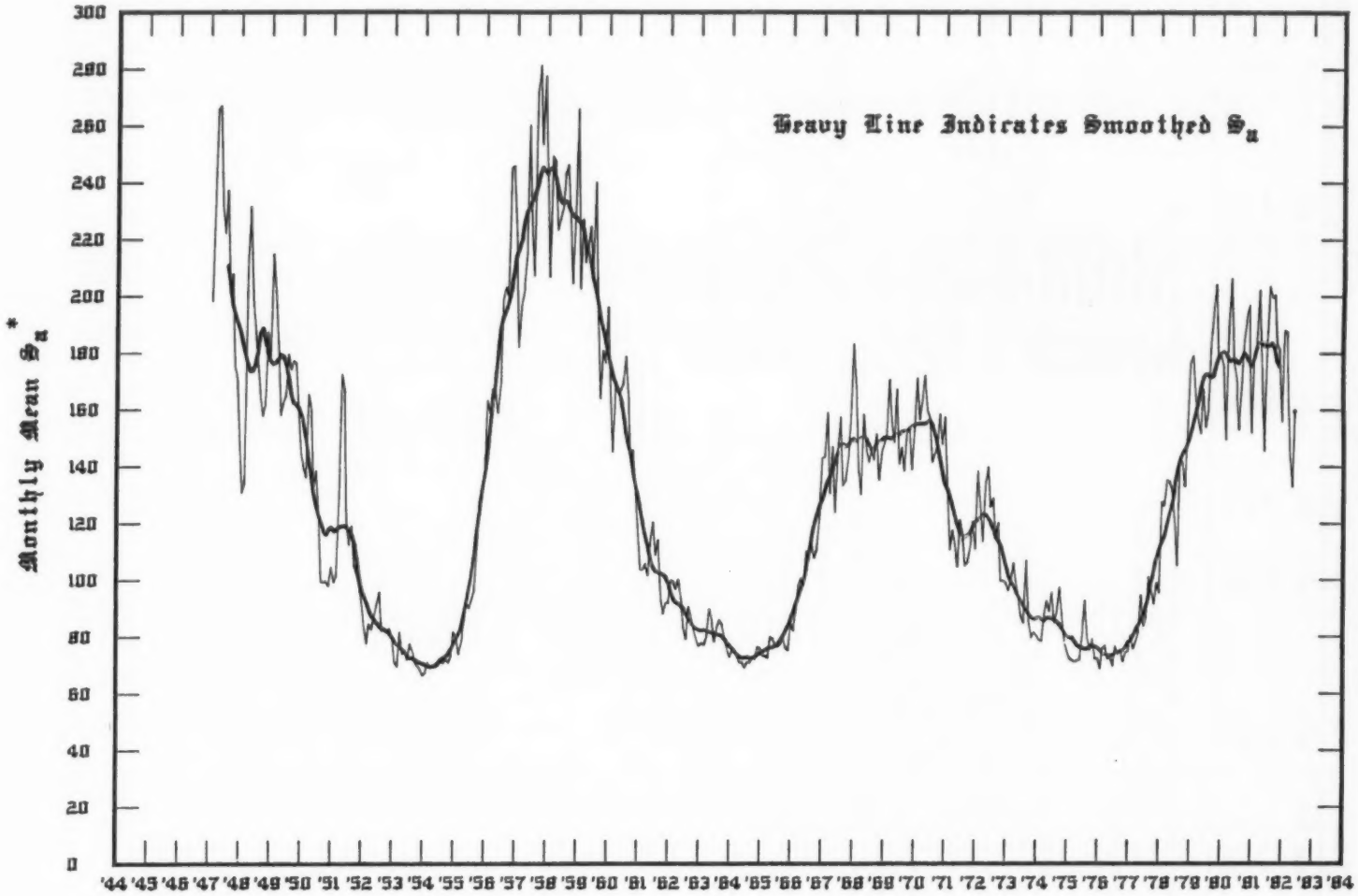
Sta	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
KHAR	Aug 29	0958E		1057D	280	0.85	H-alpha	SP
ABST	Aug 31	0554	0621	0704D	076	1.00	H-alpha	SP
KHAR	Aug 31	0850E		0915D	295	1.00	H-alpha	S
KHAR	Aug 31	1120E	1134	1200D	295	1.00	H-alpha	S

QUALIFIERS ON START, MAX AND END TIMES
D = event ended after tabulated time
E = event began before the tabulated time
U = uncertain time

TYPE OF EVENT
A = eruptive active region prominence
CB = coronal cloud bubble
D = coronal depletions
E = coronal enhancement
EL = coronal expanding loop
II = Type II radio burst
IVm = moving Type IV radio burst
Q = eruptive quiescent prominence
R = coronal ray or streamer
S = flare-surge if there is a known flare association
SP = flare-spray if there is a known flare association
* = movement may be caused by ionospheric refraction

REPORTING STATIONS
ABST = Abastumani
BIGB = Big Bear
BLEN = Bleien
CULG = Culgoora
DWIN = Dwingeloo
GEOR = Georgiana
HALE = Haleakala
HAOC = High Altitude Observatory's SMM Coronagraph/Polarimeter
HAOK = High Altitude Observatory's MARK-III Coronameter at Mauna Loa
HARV = Harvard (Fort Davis)
KHAR = Kharkov
LEAR = Learmonth
LVOV = Lvov
MANI = Manila
MITK = Mitaka
NRLC = Naval Research Laboratory's White-Light Coronagraph Experiment on P78-1
PALE = Palehua
SGMR = Sagamore Hill
TELV = Tel Aviv
VORO = Voroshilov
WEIS = Weissenau
WEND = Wendelstein
UDAI = Udaipur

Monthly Mean Ottawa 10.7 cm Solar Radio Flux
February 1947 – June 1982



* Solar Flux Units (10^{-22} W/m^2 Hz) Adjusted to 1 A.U., Series B.

SGD 462 Part II (Comprehensive)

AUGUST 1980 DATA

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* Solar Flux Units (10^{-22} W/m^2 Hz) Adjusted to 1 A.U., Series B.

H- ALPHA SOLAR FLARES

AUGUST 1980

	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
575	CULG	01	0210	0230	0309	S07	W30	.538	17008	29.8	59	-F		C	0230	40	.5	
576	ABST	01	0700	0702	0730	N30	E02	.412	17007	1.4	30	-N		C	0702	175	1.9	EJG
GRP86577		01	0906E	0934	0938D	S07	W37	.630	17008	29.6	32	-F						E
	KHAR	01	0906E		0938D	S07	W38	.643	17008	29.5	32D	-F		P				E
	KHAR	01	0931E	0934	0938D	S08	W37	.635	17008	29.6	7D	-F		P				D
578	KHAR	01	0920E	0923	0934D	N14	W90	1.000	16998	25.6	14D	-F		V	0923			DH
579	KHAR	01	1009E	1009	1015D	N13	W14	.269	17017	31.4	6D	-F		P	1011	80	.9	
GRP86580		01	1045+5	1049+2	1107	S31	E33	.748	17020	3.9	22	-N						EG
	HTPR	01	1045	1049	1108	S32	E32	.749	17020	3.8	23	-B		C	1049	100	1.1	EG
	WEND	01	1045E		1059	S30	E30	.718	17020	3.7	14D	-N		V		143	2.0	
	KHAR	01	1048E	1051	1115D	S32	E35	.770	17020	4.1	27D	1N		P	1048	160	2.7	
	CATA	01	1050	1050	1105	S30	E34	.748	17020	4.0	15	-F	2	C	1050	56	.9	
581	KHAR	01	1211E	1214	1217D	S37	E06	.684	17016	2.0	6D	-F		P				D
582	HOLL	01	2050	2050	2100	N29	W18	.482	17007	31.5	10	-F	3	C		21		
583	VORO	02	0025	0028	0040	N13	E60	.862	17022	6.5	15	-F		C	0028	54	1.1	DJ
584	VORO	02	0058	0108	0120	N13	E60	.862	17022	6.5	22	-F		C	0108	45	.9	DJ
GRP86585		02	0846+2	0849 0856	0924	N28	W25	.537	17007	31.5	38	-F						E
	KHAR	02	0846E	0849	0917D	N28	W24	.526	17007	31.6	31D	-F		P	0852	110	1.3	E
	HTPR	02	0848		0859D	N27	W27	.549	17007	31.3	11D	-F		C	0848	30	.3	E
	KANZ	02	0848	0856	0924	N28	W25	.537	17007	31.5	36	-F	2					
586	KHAR	02	0918E	0920	0927D	N19	E16	.349	17019	3.6	9D	-F		V	0920			D
GRP86587		02	1143+5	1145 1152	1219	S34	W75	.988	17004	27.9	36	-N						GL
	KHAR	02	1143E	1145	1153D	S34	W76	.990	17004	27.8	10D	-F		P				T
	KANZ	02	1148	1152	1219	S34	W74	.985	17004	27.9	31	-B	2					GL
588	KANZ	02	1255	1300	1308	N19	W64	.895	17002	28.7	13	-F	1					G
589	KANZ	02	1551	1558	1610	S34	W75	.988	17004	28.0	19	-B	2					G
GRP86590		02	1619+3	1622 1628+2	1652	N19	E11	.292	17019	3.5	33	-N				80	.8	G
	BIGB	02	1619	1622	1750	N19	E12	.302	17019	3.6	91	-N	3	C	1622	90	.9	G
	RAMY	02	1620	1628	1647	N19	E11	.292	17019	3.5	27	-N	3	C		93		
	HOLL	02	1620	1629	1644	N19	E11	.292	17019	3.5	24	-N	3	C		83		
	KANZ	02	1622	1630	1657	N18	E11	.279	17019	3.5	35	-N	3					G
591	HOLL	02	1757	1800	1815	S10	W56	.848	17008	29.5	18	-F	3	C		20		
592	VORO	02	2324	2330	2350	N20	E07	.271	17019	3.5	26	-F		C	2330	125	1.3	EJL
593	CULG	02	2340	2343	2345D	S46	E21	.820		4.6	5D	-F		P	2343	50	.6	G
GRP86594		03	0020	0111 0128	0638D	S32	W03	.616	17016	2.8	378	1F						FISU
	CULG	03	0020	0111	0638U	S33	W04	.631	17016	2.7	378D	1N		C	0111	310	4.0	USFI
	BOUL	03	0040E	0128	0130D	S32	W03	.616	17016	2.8	50D	1F	0	C				
595	CULG	03	0105	0120	0132	S46	E32	.859		5.4	27	-F		C	0120	70	.8	G
GRP86596		03	0435>9	0445+2	0510	N29	W33	.626	17007	31.7	35	1N				200	2.6	EG
	CULG	03	0435	0445	0522	N30	W33	.633	17007	31.7	47	1N		C	0445	220	2.8	
	YUNN	03	0445	0447	0457	N28	W34	.630	17007	31.6	12	1N		C		193	2.6	EG
597	KANZ	03	1208	1220	1232	S09	W54	.828	17008	30.5	24	-F	2					
GRP86598		03	1228+1	1232+3	1256	N13	E39	.630	17022	6.4	28	-F						EG
	KANZ	03	1228	1232	1300	N13	E39	.630	17022	6.4	32	-N	3					G
	LVOV	03	1229	1235	1252	N13	E39	.630	17022	6.4	23	-F		C	1235	150	2.0	E

H- ALPHA SOLAR FLARES

AUGUST 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
	03	1945	2151	NO FLARE PATROL												
599 CULG	04	0038	0041	0050	S37	E33	.797		6.5	12	-F	C	0041	30	.5	G
600 ABST	04	0458E	0501	0516D	N24	E42	.696		7.4	18D	-N	P	0501	87	1.2	DJG
601 ABST	04	0541E	0541	0543D	S22	E21	.570	17028	5.8	2D	-N	P	0541	114	1.4	FJG
602 ABST	04	0541E	0541	0617D	N12	W50	.763	17033	31.5	36D	-N	P	0541	87	1.4	DJ
603 ISTA	04	0800		0828	N01	E47	.733		7.9	28	-N					E
604 KHAR	04	0915E	0917	0936D	N13	W53	.795	17033	31.4	21D	-F	V	0917			DHT
605 KHAR	04	0955E	0955	1107D	S26	E88	1.000	17039	11.0	72D	-F	P	0955			DH
606 KHAR	04	1012E	1013	1016D	N13	W53	.795	17033	31.4	4D	-F	V	1013			DHT
GRP86607	04	1022+7	1029 1045	1045D	N12	W53	.795	17033	31.5	23	-F					E
KHAR	04	1022E	1029	1045D	N13	W53	.795	17033	31.5	23D	-F	P	1029	65	1.1	ET
KANZ	04	1029	1045	1045D	N11	W53	.794	17033	31.5	16D	-F	2				
608 KHAR	04	1045E	1045	1049D	N34	W47	.784	17007	31.9	4D	-F	P	1045	35	.5	D
609 KHAR	04	1109E	1112	1124D	N13	W54	.805	17033	31.4	15D	-F	P	1112	70	1.2	ET
	04	1441	1455	NO FLARE PATROL												
	04	1601	1701	NO FLARE PATROL												
	04	2010	2134	NO FLARE PATROL												
	04	2240	2244	NO FLARE PATROL												
610 CULG	04	2250	2256	2315	S18	W68	.947	17013	30.9	25	-N	C	2256	60		G
611 CULG	05	0010	0015	0029	S18	E67	.942		10.0	19	-N	C	0015	70	1.8	
612 CULG	05	0016	0021	0033	S23	E50	.837	17035	8.8	17	-F	C	0021	60	1.0	
613 CULG	05	0040	0044	0052	N12	W61	.870	17033	31.5	12	-N	C	0044	40	.8	
614 CULG	05	0213	0217	0227	S13	E46	.760	17031	8.5	14	-F	C	0217	40	.6	
615 ISTA	05	0630		0700	S01	E29	.497	17027	7.4	30	-F					E
GRP86616	05	0755+5	0804+2	0819	N28	W61	.880	17007	31.8	24	-F					EG
HTPR	05	0755	0806	0820	N29	W62	.888	17007	31.7	25	-F	C	0755	60	1.2	E
CATA	05	0800	0805	0810	N28	W61	.880	17007	31.8	10	-F	2 C	0805	84	1.8	
KANZ	05	0800	0804	0819	N27	W60	.871	17007	31.8	19	-N	3				G
GRP86617	05	0843+6	0846+3	0856	S21	E06	.465	17028	5.8	13	-F					EG
HTPR	05	0843	0846	0853	S20	E05	.446	17028	5.7	10	-F	C	0846	30	.3	E
KANZ	05	0849	0849	0859	S22	E07	.483	17028	5.9	10	-F	2				G
618 KHAR	05	0930E	0936	0941D	S04	E28	.496	17027	7.5	11D	-F	P	0936	35	.4	D
	05	1844	1858	NO FLARE PATROL												
	05	2013	2027	NO FLARE PATROL												
	05	2100	2128	NO FLARE PATROL												
GRP86619	06	0552+0	0553+3	0603	N11	W77	.971	17033	31.5	11	-N			40		
TACH	06	0552	0553	0603	N11	W80	.982	17033	31.2	11	-B	C	0553	88		D
HTPR	06	0552	0556	0612	N12	W75	.962	17033	31.6	20	-F	C	0556	40		
PEKG	06	0552	0555	0600	N11	W77	.971	17033	31.5	8	-N	C	0555	34		E
620 HTPR	06	0638	0642	0650	N18	E34	.577	17029	8.8	12	-F	C	0642	50	.6	E
621 HTPR	06	0706	0727	0735	N18	E35	.590	17029	8.9	29	-F	C	0727	20	.2	
622 ABST	06	0828E	0830	0845D	N20	E35	.598	17029	9.0	17D	-F	P	0830	131	1.6	FJ
623 HTPR	06	0915	0919	0925	N17	E34	.573	17029	8.9	10	-F	C	0919	30	.4	

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GRP86624	06	1005+7	1015+3	1020	N17	E33	.560	17029	8.9	15	-N				90	1.1	E
HTPR	06	1005	1016	1025	N17	E34	.573	17029	9.0	20	-B		C	1016	100	1.2	
KHAR	06	1011E	1018	1020D	N20	E33	.572	17029	8.9	9D	-N		P	1018	80	1.0	E
YUNN	06	1012	1015	1019	N17	E33	.560	17029	8.9	7	-N		C		89	1.0	
625 HTPR	06	1120	1129	1214	N17	E33	.560	17029	8.9	54	-N		C	1129	80	1.0	
626 HTPR	06	1356	1358	1404	S04	E10	.245	17027	7.3	8	-F		C	1358	10	.1	
627 HTPR	06	1520	1525	1535	N12	W79	.978	17033	31.7	15	-F		C	1525	30		
628 HTPR	06	1540	1547	1620	N19	W41	.668	17019	3.6	40	-F		C	1547	50	.7	E
	06	1854	1905	NO FLARE PATROL													
629 HOLL	06	1955	2004	2013	S04	E05	.196	17027	7.2	18	-F	3	C		29		
	06	2128	2226	NO FLARE PATROL													
GRP86630	07	0052E	0052 0115	0130	S04	E02	.180	17027	7.2	38	?N						FK
PEKG	07	0052E	0052	0130	S04	E02	.180	17027	7.2	38D	?N		P	0052	210	2.2	FK
			IMP.1 NO : CULG PURP														
PEKG	07	0052E	0115	0130	S04	E02	.180	17027	7.2	38D	1N		P				
631 PEKG	07	0547	0556	0611	N19	W50	.769	17019	3.5	24	-F		C	0556	34	.5	EG
GRP86632	07	0721+3	0724+2	0740	N12	W11	.213	17022	6.5	19	-F						EGJ
ABST	07	0721	0724	0745	N12	W12	.228	17022	6.4	24	-N		C	0744	175	1.8	EJG
HTPR	07	0724	0726	0734	N12	W11	.213	17022	6.5	10	-F		C	0726	30	.3	E
633 ABST	07	0817E	0819	0827D	N17	W51	.777	17019	3.5	10D	?F		P	0819	157	2.5	EJG
			IMP.1 NO : HTPR YUNN PURP PEKG CATA														
GRP86634	07	0856+3	0858+2	0915	N12	W12	.228	17022	6.5	19	-N				50	.5	EGJ
HTPR	07	0856	0859	0910	N12	W12	.228	17022	6.5	14	-F		C	0859	40	.4	E
ABST	07	0856	0858	0919	N12	W12	.228	17022	6.5	23	-N		C	0858	175	1.8	EJG
YUNN	07	0859	0900	0900D	N13	W12	.236	17022	6.5	1D	-N		P		48	.5	G
YUNN	07	0859	0900	0900D	N13	W12	.236	17022	6.5	1D	-N		P		48	.5	G
635 KHAR	07	0902E	0905	0923D	S20	E90	1.001	17044	14.1	21D	-F		P	0905			HT
636 KHAR	07	0902E	0902	0908D	N32	E00	.436		7.4	6D	-F		P	0902			E
GRP86637	07	1013	1016+1	1023	S17	E78	.986	17042	13.3	10	-F				40		
HTPR	07	1013	1016	1022	S17	E77	.983	17042	13.2	9	-F		C	1016	50		
KHAR	07	1014E	1017	1023D	S17	E80	.991	17042	13.4	9D	-F		P	1017	30		
638 KHAR	07	1018E	1021	1026D	S07	E90	1.000		14.2	8D	-F		P	1019			H
639 GEOR	07	1026	1036	1040	S20	E90	1.001	17044	14.2	14	-B	1					G
640 KHAR	07	1054E	1057	1101D	S22	W23	.589	17028	5.7	7D	-F		P	1057	55	.7	E
GRP86641	07	1115	1121 1128	1145	S20	E90	1.001	17044	14.2	30	-N						EHQ
HTPR	07	1115	1121	1140	S20	E90	1.001	17044	14.2	25	-N		C	1121	50		E
KHAR	07	1121E	1128	1145D	S20	E90	1.001	17044	14.2	24D	-N		P	1128			HQT
ATHN	07	1134E	1137	1202	S25	E90	1.001	17044	14.2	28D	-B	3	V	1137	48		
642 HTPR	07	1218	1219	1222	S17	E76	.980	17042	13.2	4	-F		C	1219	20		
643 KANZ	07	1232	1232	1247	N19	W52	.789	17019	3.6	15	-N	2					G
GRP86644	07	1325+1	1327+3	1342	N20	W53	.801	17019	3.6	17	-N						
KANZ	07	1325	1329	1343	N19	W53	.799	17019	3.6	18	-B	2					
HTPR	07	1325	1327	1333	N20	W52	.791	17019	3.7	8	-N		C	1327	60	.9	
WEND	07	1326	1330	1342	N20	W53	.801	17019	3.6	16	1N		V	1330	171	3.1	
645 HTPR	07	1540	1550	1635	S08	W17	.376	17023	6.4	55	-F		C	1550	30	.3	E

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646 HOLL	07	2000	2001	2008	S19	E84	.998	17044	14.1	8	-N	3 C				
647 CULG	07	2314	2320	0006	S25	E89	1.000	17044	14.6	52	-N	C	2320	20		
648 CULG	07	2348	2352	0002	N12	W21	.367	17022	6.4	14	-F	C	2352	40	.4	
649 CULG	08	0150	0207U	0222	S24	E88	1.000	17044	14.7	32	-F	C	0207	20		
GRP86650	08	0230+5	0247+1	0312	S22	E86	1.000	17044	14.6	42	-N			45		D
PEKG	08	0230	0247	0319	S20	E84	.998	17044	14.4	49	1N	P	0247	50		D
CULG	08	0235	0248	0304	S24	E88	1.000	17044	14.7	29	-N	C	0248	40		
651 ABST	08	0501E	0501	0513D	S06	W16	.344	17027	7.0	12D	-N	P	0501	87	.9	DJ
652 CULG	08	0641	0642	0655	S03	W15	.302	17027	7.2	14	-F	C	0642	60	.6	
653 PEKG	08	0742	0743	0749	S05	W13	.295	17027	7.3	7	-N	P	0743	42	.4	F
GRP86654	08	0816	0826 0858	0859	S27	E79	.993	17044	14.3	43	-N					D
ATHN	08	0816	0826	0852	S35	E80	.997	17044	14.3	36	-N	3 V	0826	64		
KHAR	08	0850E	0858	0905D	S20	E78	.988	17044	14.2	15D	-F	P	0858	30		D
655 KHAR	08	0922E	0939 IMP.1	1008D NO : CATA	N28	W83	.987	17007	2.2	46D	?N	P	0939	110		D
656 KANZ	08	1219	1222	1237	N25	W09	.353		7.8	18	-B	2				GL
657 ATHN	08	1221	1222	1233	S16	E01	.379	17031	8.6	12	-N	3 V	1222	80	.8	
	08	2036	2043	NO FLARE PATROL												
	08	2051	2100	NO FLARE PATROL												
GRP86658	08	2242	2256	2348	S07	W33	.581	17023	6.5	66	-N					D
CULG	08	2242	2256	2348	S07	W34	.594	17023	6.4	66	-N	C	2256	50	.6	
VORO	08	2307E		2344D	S07	W32	.567	17023	6.6	37D	-F	C	2307	36	.4	D
659 CULG	09	0148	0152	0213	N18	W12	.285	17029	8.2	25	-F	C	0152	60	.6	
GRP86660	09	0209+6	0218+1 0237	0249	N18	E02	.206	17045	9.2	40	-F			60	.6	E
CULG	09	0209	0219	0249	N18	E02	.206	17045	9.2	40	-F	C	0219	40	.4	
VORO	09	0215	0218	0236	N17	E06	.211	17045	9.5	21	-N	C	0218	81	.8	E
PEKG	09	0232	0237	0257	N18	E02	.206	17045	9.3	25	-F	P	0237	63	.6	E
661 PEKG	09	0404	0424	0439	S06	W29	.522	17027	7.0	35	-N	P	0421	67	.8	E
662 CULG	09	0440	0441	0456	S06	W28	.508	17027	7.1	16	-F	C	0441	30	.3	T
663 ABST	09	0526E	0535	0640	S06	W30	.535	17027	7.0	74D	-F	P	0535	140	1.7	FJK
GRP86664	09	0532	0633+2	0640D	N10	E01	.067	17034	9.3	68	-N					FJK
ABST	09	0532	0633	0909D	N10	E04	.094	17034	9.5	217D	1N	P	0633	218	2.3	FJK
CATA	09	0630E	0635	0640	N11	W02	.089	17034	9.1	10D	-F	2 P	0635	28	.3	
GRP86665	09	0841E	0841 0857	1016D	N11	E01	.084	17034	9.4	95	-N					EHK
ABST	09	0532	0841	0909D	N10	E04	.094	17034	9.5	217D	1N	P	0841	262	2.7	
KANZ	09	0842E		0946D	N11	E01	.084	17034	9.4	64D	-N	2				
MANI	09	0845E	0845U	0851D	N10	E01	.067	17034	9.4	6D	-F	1 V		50	.5	
YUNN	09	0848	0857	0859D	N11	E01	.084	17034	9.4	11D	-N	P		129	1.3	
KHAR	09	0858E	0914	1016D	N11	W01	.084	17034	9.3	78D	-N	P	0914	200	2.0	EHKT
666 KHAR	09	0934E	0946	0957D	S11	W43	.721	17023	6.2	23D	-F	P	0950	75	1.1	DH
667 KHAR	09	0944E	0948	0953D	S05	W35	.598	17027	6.8	9D	-F	P	0950	80	1.0	E
668 KHAR	09	0957E	1000	1009D	S24	E73	.975	17044	14.9	12D	-F	P	1000	40		D
669 KHAR	09	1036E	1039	1052D	N18	W11	.274	17029	8.6	16D	-F	P	1039	35	.4	E

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670 KHAR	09	1049E	1052	1056D	S11	W43	.721	17023	6.2	7D	-F	P	1052	50	.7	D
GRP86671	09	1118E	1140 1210	1220D	N09	00	.047	17034	9.5	62	-N					EH
KHAR	09	1118E	1140	1200D	N10	W01	.067	17034	9.4	42D	-N	P	1140	110	1.1	EHT
ATHN	09	1200E	1210U	1220D	N08	E02	.046	17034	9.6	20D	-N	3 V	1210	48	.5	
	09	1401	1412	NO FLARE PATROL												
GRP86672	09	1420+2	1423+5	1458	N11	W02	.089	17034	9.4	38	-N			50	.5	
BIGB	09	1420	1423	1502	N11	W02	.089	17034	9.4	42	-N	3 C	1423	70	.7	
RAMY	09	1422	1428	1453	N11	W03	.097	17034	9.4	31	-N	3 C		28		
673 BIGB	09	1431	1433	1454	S14	E90	1.000	17051	16.4	23	?N	3 C	1433	70		
			IMP.1 NO : HOLL													
674 RAMY	09	1757	1802	1815	N10	W05	.108	17034	9.4	18	-F	3 C		63		
675 BIGB	09	2003	2015	2127	S12	E90	1.000	17051	16.6	84	1N	3 C	2015	60		
676 BIGB	09	2206	2223	2233	S30	E90	1.002	17060	16.7	27	?N	3 C	2223	50		
			IMP.1 NO : HOLL CULG VORO													
677 VORO	09	2239	2250	2308	S12	E47	.768	17042	13.5	29	-F	C	2250	45	.7	EJL
GRP86678	09	2252	2253	2312	S07	W40	.670	17027	7.0	20	-F			25	.3	
HOLL	09	2252	2253	2312	S09	W41	.690	17027	6.9	20	-F	3 C		27		
MANI	09	2255E	2255U	2310D	S06	W40	.666	17027	7.0	15D	-F	1 V		20	.3	
679 CULG	09	2318	2335	2341	S06	W47	.749	17023	6.4	23	-F	C	2335	50	.8	K
GRP86680	09	2333+6	2341+4	2359	N11	W07	.145	17034	9.5	26	-N			50	.5	DJ
CULG	09	2333	2341	0003	N11	W07	.145	17034	9.5	30	-N	C	2341	90	.9	
VORO	09	2339	2345	2355	N11	W07	.145	17034	9.5	16	-N	C	2345	45	.5	DJ
MANI	09	2345E	2345U	2354D	N10	W08	.152	17034	9.4	9D	-F	1 V		30	.3	
681 CULG	10	0044	0050	0110	S18	E42	.744	17042	13.2	26	-F	C	0050	40	.6	
682 CULG	10	0054	0058	0108	S04	W47	.744	17027	6.5	14	-F	C	0058	40	.6	HFK
683 CULG	10	0155	0157	0207	N11	W09	.174	17034	9.4	12	-N	C	0157	50	.5	
GRP86684	10	0204+2	0208+1	0227	S05	W40	.663	17027	7.1	23	-N			60	.8	K
CULG	10	0204	0209	0234	S05	W40	.663	17027	7.1	30	-B	C	0209	80	1.0	FKT
VORO	10	0206	0208	0220	S06	W40	.666	17027	7.1	14	-F	C	0208	54	.8	E
685 CULG	10	0240	0244	0250	N11	W10	.189	17034	9.4	10	-F	C	0244	60	.6	
GRP86686	10	0253+4	0259+3	0330	N11	W10	.189	17034	9.4	37	-N			150	1.5	J
CULG	10	0253	0259	0330	N11	W10	.189	17034	9.4	37	-N	C	0259	170	1.8	F
VORO	10	0257	0302	0310D	N11	W10	.189	17034	9.4	13D	-N	C	0302	125	1.3	EJ
687 CULG	10	0259	0308	0322	S04	W50	.777	17023	6.4	23	?N	C	0308	200	3.0	HT
			IMP.1 NO : VORO													
GRP86688	10	0510	0515	0532	S26	E57	.899	17044	14.5	22	1N			100	2.2	EJ
ABST	10	0510	0515	0532	S27	E57	.902	17044	14.5	22	1N	C	0515	131	2.9	EJ
PEKG	10	0517E	0517	0517D	S25	E58	.903	17044	14.6		-N	P	0517	67	1.5	E
689 ABST	10	0526	0527	0541D	N12	W12	.227	17034	9.3	15D	-N	P	0527	114	1.2	EJL
690 ABST	10	0526	0530	0535	S04	W49	.766	17027	6.6	9	-N	C	0530	87	1.4	DJK
GRP86691	10	0556	0605+1	0615	S06	W41	.679	17027	7.2	19	-F					
YUNN	10	0556	0606	0615	S05	W42	.688	17027	7.1	19	1F	C		193	2.7	
CATA	10	0605E	0605	0615	S07	W41	.652	17027	7.2	10D	-F	2 P	0605	84	1.2	

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GRP86692	10	0730+7	0735+3	0746	S04	W50	.777	17027	6.6	16	-N					JV
WEND	10	0730E		0742D	S04	W48	.755	17027	6.7	12D	-N	V	0735	57	.9	D
KANZ	10	0732	0737	0746	S04	W51	.788	17027	6.5	14	-N	2				
CATA	10	0735E	0735	0745	S04	W51	.775	17027	6.5	10D	-F	2 P	0735	112	1.9	
ABST	10	0737	0738	0747	S03	W50	.775	17027	6.6	10	1N	C	0738	175	2.9	EJV
GRP86693	10	0750+1	0751+1	0803	S06	W44	.715	17027	7.0	13	-N			130	1.8	JV
WEND	10	0745E		0758D	S05	W42	.688	17027	7.2	13D	-N	V	0748	114	1.6	D
ABST	10	0750	0752	0759	S06	W44	.715	17027	7.0	9	1N	C	0752	148	2.2	EJV
CATA	10	0750	0750	0750D	S07	W44	.691	17027	7.0		1F	2 P	0750	140	2.1	
KANZ	10	0751	0751	0806	S07	W44	.718	17027	7.0	15	-N	2				
694 CATA	10	0945	0950	1000	S05	W52	.785	17027	6.5	15	?F	2 C	0950	140	2.4	
			IMP.1	NO : ABST												
GRP86695	10	1233+4	1238+1	1257	S05	W52	.800	17027	6.6	24	-B			110	1.8	D
WEND	10	1233E		1246D	S03	W51	.786	17027	6.7	13D	-N	V	1237	114	1.9	D
RAMY	10	1237	1239	1257	S06	W52	.802	17027	6.6	20	-B	3 C		106		
KANZ	10	1238E	1238	1253D	S05	W52	.800	17027	6.6	15D	-B	2				
	10	1413	1443	NO FLARE PATROL												
696 BIGB	10	1803	1806	1825	S27	E90	1.001	17052	17.5	22	?B	3 C	1806	140		
			IMP.1	NO : HOLL												
697 HOLL	10	1902	1903	1910	N09	W19	.326	17034	9.4	8	-F	3 C		27		
698 BIGB	10	1910	1913	1929	N11	E90	1.000	17053	17.5	19	?N	2 C	1913	60		
			IMP.1	NO : HOLL												
699 HOLL	10	1957	2005	2008	S11	W57	.860	17023	6.6	11	-F	3 C		27		
700 HOLL	10	2058	2100	2107	S22	E46	.801	17044	14.3	9	-F	3 C		54		
701 HOLL	10	2102	2103	2125	S20	E74	.976	17060	16.4	23	-N	3 C				
GRP86702	10	2128+6	2140 2152	2156D	S24	E48	.827	17044	14.5	28	-N					FJ
HOLL	10	2128	2140	2156	S23	E50	.839	17044	14.6	28	-N	3 C		138		
CULG	10	2134	2152	2230	S26	E46	.820	17044	14.3	56	1N	C	2152	280	4.8	FJ
703 CULG	10	2220	2221	2224	N13	W58	.843	17022	6.6	4	-F	C	2221	20	.3	G
704 CULG	10	2249	2331	2338U	S02	W60	.870	17027	6.5	49D	?F	C	2331	100	2.0	
			IMP.1	NO : HOLL BIGB												
705 CULG	10	2339	2423	0118	S25	E45	.807	17044	14.4	99	1F	C	2423	160	2.6	FKT
706 CULG	10	2342	2346	0011	S03	W62	.888	17027	6.3	29	?B	C	2346	140	2.8	HL
			IMP.1	NO : HOLL BIGB												
707 CULG	11	0003	0030	0110	S10	W62	.898	17023	6.4	67	-F	C	0030	80	1.8	T
708 CULG	11	0045	0103	0207U	S27	E78	.991	17060	16.9	82D	3B	C	0103	530		FJ
709 CULG	11	0154	0207	0314U	S24	E37	.734	17044	13.9	80D	-N	C	0207	100	1.4	HT
710 CULG	11	0429	0435	0443	S02	W65	.909	17027	6.3	14	-F	C	0435	40	.5	
711 YUNN	11	0432	0432	0443	S24	E35	.716	17044	13.8	11	-N	C		48	.5	
712 CULG	11	0529	0540	0606	S32	E50	.876	17044	15.0	37	?F	C	0540	120	2.4	
			IMP.1	NO : TACH												
GRP86713	11	0615	0625	0658	S07	W65	.915	17027	6.4	43	-N					E
CULG	11	0615	0625	0658D	S06	W69	.940	17027	6.1	43D	-N	C	0625	60	1.5	
ISTA	11	0623E		0657	S08	W61	.887	17027	6.7	34D	1N					E
714 YUNN	11	0744D	0758	0802	N14	E56	.824	17048	15.5	18D	?N	P		113	2.1	
			IMP.1	NO : CATA												

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86715	11	0744+6	0755+4	0821	S03	W65	.910	17027	6.4	37	1F				120	2.9	
YUNN	11	0744	0759	0817	S02	W66	.916	17027	6.4	33	1N		C		161		
CATA	11	0750	0755	0825	S04	W65	.904	17027	6.5	35	1F	2	C	0755	84		
716 YUNN	11	0802D	0813	0816	S27	E67	.955	17060	16.4	14D	-N		P		64		
717 ABST	11	0958E	0959	1005D	N14	E55	.815	17048	15.5	7D	1F		P	0959	131	2.2	E
718 HOLL	11	1453	1455	1459	S24	W81	.995	17028	5.5	6	-F	3	C				
719 HOLL	11	1719	1719	1728	S27	W04	.554	17039	11.4	9	-N	3	C		26		
720 PALE	11	1808	1808U	1820	N17	E49	.755	17048	15.4	12	-F	2	C		48		
	11	1917	1934	NO FLARE PATROL													
721 PALE	11	1919	1923	1932	S20	E29	.628	17044	14.0	13	-F	2	C		50		
	11	1945	1957	NO FLARE PATROL													
722 RAMY	11	2025	2026	2035	S24	E58	.900	17060	16.2	10	-F	3	C		19		
723 RAMY	11	2028	2028	2036	N16	E47	.731	17048	15.4	8	-F	3	C		24		
724 RAMY	11	2030	2030	2041	N07	E44	.691	17049	15.2	11	-F	3	C		28		
	11	2038	2047	NO FLARE PATROL													
GRP86725	11	2140+2	2141+5	2153	S22	E27	.627	17044	13.9	13	-F						
CULG	11	2140	2141	2152	S23	E27	.636	17044	13.9	12	-N		C	2141	140	1.8	
HOLL	11	2142	2146	2154	S21	E27	.618	17044	13.9	12	-F	3	C		40		
726 CULG	11	2143	2146	2205	N18	W23	.426	17037	10.2	22	-F		C	2146	90	1.1	
GRP86727	11	2152+1	2156+0	2211	S08	W69	.941	17027	6.7	19	-F				50		
CULG	11	2152	2156	2215	S07	W70	.946	17027	6.7	23	-N		C	2156	40		
HOLL	11	2153	2156	2207	S10	W68	.938	17027	6.8	14	-F	3	C		61		
GRP86728	11	2157	2158 2222	2228	N15	E47	.730	17048	15.4	31	-F						
HOLL	11	2157	2158	2232	N15	E47	.730	17048	15.4	35	-F	3	C		37		
PALE	11	2211E	2222U	2224	N16	E47	.731	17048	15.4	13D	-F	3	C		30		
729 CULG	11	2247	2259	2317	S07	W70	.946	17027	6.7	30	-F		C	2259	70		
GRP86730	11	2250E	2253 2302	2305	N15	E47	.730	17048	15.5	15	-F						
MANI	11	2250E	2253	2305D	N15	E47	.730	17048	15.5	15D	-F	1	V		50	.8	
PALE	11	2251E	2302U	2304	N16	E47	.731	17048	15.5	13D	-F	3	C		40		
731 CULG	11	2309	2313	2321	S30	W08	.605	17039	11.4	12	-N		C	2313	40	.5	
732 HOLL	11	2344	2345	2352D	S06	W59	.868	17027	7.6	8D	-N	3	C		73		
733 CULG	12	0006	0009	0021	S06	W72	.956	17023	6.6	15	-F		C	0009	40		
734 CULG	12	0019	0028	0045U	N13	E47	.728	17048	15.5	26D	-F		C	0028	90	1.3	T
735 CULG	12	0033	0038	0047	N11	W36	.586	17034	9.3	14	-F		C	0038	50	.6	
736 CULG	12	0053	0058	0107	S25	E70	.966	17061	17.3	14	-F		C	0058	40		
737 CULG	12	0104	0104	0111	S06	W72	.956	17023	6.6	7	-N		C	0104	30		
738 CULG	12	0111	0116	0131	S30	W10	.612	17039	11.3	20	-F		C	0116	30	.4	
739 CULG	12	0127	0133	0156	N07	E45	.703	17049	15.4	29	-F		C	0133	100	1.4	F
GRP86740	12	0235+5	0244	0257	S07	W78	.982	17023	6.3	22	1N						E
CULG	12	0235	0244	0257	S07	W81	.990	17023	6.0	22	1N		C	0244	60		
PEKG	12	0240	0241	0241D	S07	W76	.974	17023	6.4	1D	-F		P	0241	46		E

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GRP86741	12	0238	0242 0253	0255	N13	E46	.716	17048	15.6	17	?N						EK
PEKG	12	0238	0242	0255	N13	E46	.716	17048	15.6	17	?N		C	0241	168	2.5	EK
		IMP.1 NO : CULG															
PEKG	12	0238	0253	0255	N13	E46	.716	17048	15.6	17	-F		C	0253	126	1.8	E
GRP86742	12	0238+2	0240+1	0247	S13	E47	.773	17051	15.6	9	-F				35	.5	D
CULG	12	0238	0240	0248	S13	E47	.773	17051	15.6	10	-F	*	C	0240	40	.6	T
PEKG	12	0240	0241	0245	S13	E47	.773	17051	15.6	5	-F	*	C	0241	29	.5	D
743 CULG	12	0242	0248	0318	N16	E82	.986	17054	18.3	36	?N		C	0248	100		
			IMP.1 NO : PEKG														
744 CULG	12	0256	0303	0311	S30	W11	.615	17039	11.3	15	-F		C	0303	20	.2	
745 CULG	12	0329	0332	0338	S07	W75	.970	17023	6.5	9	-N		C	0332	40		
746 CULG	12	0331	0349	0402	S11	E89	1.000	17063	18.8	31	1N		C	0349	80		
747 CULG	12	0338	0341	0352	S30	W11	.615	17039	11.3	14	-N		C	0341	40	.5	
748 CULG	12	0441	0445	0452	S23	E22	.595	17044	13.8	11	-F		C	0445	30	.4	
749 CULG	12	0504	0510	0524	S14	E44	.746	17051	15.5	20	-N		C	0510	70	1.0	FT
750 CULG	12	0528	0531	0538	S23	E22	.595	17044	13.9	10	-B		C	0531	120	1.5	
GRP86751	12	0543	0604+6	0655	S26	E61	.924	17060	16.8	72	-N						F
CULG	12	0543	0604	0709	S25	E64	.938	17060	17.0	86	1B		C	0604	250	5.0	F
CATA	12	0600E	0610	0640	S27	E59	.914	17060	16.7	40D	-F	2	P	0610	68		
752 CULG	12	0552	0556	0620	N12	E72	.946	17054	17.6	28	-F		C	0556	40		
753 CULG	12	0615	0617	0626	N12	E43	.679	17048	15.5	11	-N		C	0617	70	1.0	
754 CULG	12	0615	0623	0658	N04	E35	.573	17049	14.9	43	-F		C	0623	40	.5	DH
755 CULG	12	0628	0633	0642	N12	E72	.946	17054	17.7	14	-F		C	0633	40		
756 CULG	12	0642	0649	0658	S14	E44	.746	17051	15.6	16	-F		C	0649	50	.7	T
757 KHAR	12	0842E	0843	0849D	N13	E41	.655	17048	15.4	7D	-F		V	0843			D
758 KHAR	12	0848E	0850	0858D	S13	E43	.731	17051	15.6	10D	-F		V	0850			DH
759 KHAR	12	0852E	0852	0856D	N13	E41	.655	17048	15.4	4D	-F		V	0852			D
760 KHAR	12	0857E	0857	0906D	N14	E43	.681	17048	15.6	9D	-F		V	0857			D
761 HTPR	12	1415	1420	1434	S22	E17	.544	17044	13.9	19	-F		C	1420	100	1.1	E
762 HTPR	12	1420	1422	1437	S14	E40	.703	17051	15.6	17	-F		C	1422	50	.5	E
GRP86763	12	1557+0	1602	1610	S12	E90	1.000	17063	19.4	13	1N				130		
HTPR	12	1557		1601D	S10	E90	1.000	17063	19.4	4D	1N		C	1601	150		
BIGB	12	1557	1602U	1610	S14	E90	1.000	17063	19.4	13	1N	3	P	1602	120		
	12	1603	1604	NO FLARE PATROL													
764 RAMY	12	1755	1755	1805	S13	E38	.675	17051	15.6	10	-F	3	C		27		
765 CULG	12	2240	2243	2247	S27	E58	.908	17060	17.3	7	-F		C	2243	50	1.1	
766 CULG	13	0000	0042U	0356U	N28	E20	.479		14.5	236D	2F		C	0042	590	7.7	SFI
767 CULG	13	0002	0011	0027	S15	E35	.654	17051	15.6	25	-F		C	0011	80	1.0	
768 PEKG	13	0140	0143	0148	S27	E50	.856	17060	16.8	8	-F		C	0143	42	.8	D
769 CULG	13	0143	0157	0211	N18	W45	.711	17045	9.7	28	-F		C	0157	40	.6	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Halo Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Time (UT)	Measurement Appar (Disk)	Measurement Corr (Sq Deg)	Remarks
770 CULG	13	0155	0203	0216	N10	E60	.861	17053	17.6	21	-F		C	0203	80	1.6	
GRP86771	13	0208+0	0216+0	0224	S22	E49	.827	17060	16.8	16	-F				30	.5	D
PALE	13	0208	0216	0220	S22	E50	.835	17060	16.8	12	-F	3	C		17		
PEKG	13	0208	0216	0227	S23	E48	.823	17060	16.7	19	-N		C	0215	42	.8	D
772 PEKG	13	0214	0215	0216D	S11	E38	.665	17051	15.9	2D	-F		P	0215	8	.1	D
773 PEKG	13	0216E	0216	0230	N09	E27	.452	17048	15.1	14D	-F	*	P	0216	29	.3	D
GRP86774	13	0310	0316+1	0325	N06	E26	.436	17049	15.1	15	-N						
CULG	13	0310	0317	0327	N05	E25	.421	17049	15.0	17	1N		C	0317	180	2.0	
PALE	13	0316E	0316U	0323	N08	E27	.451	17049	15.2	7D	-F	*	C		23		
775 CULG	13	0404	0444	0537	S11	E05	.313	17042	13.5	93	-N		C	0444	120	1.3	
776 PEKG	13	0408	0412	0424	N10	E53	.793	17053	17.1	16	-F		C	0412	34	.6	E
777 PEKG	13	0415E	0415	0428	S31	E73	.982	17052	18.7	13D	-F		P	0415	13		D
778 CULG	13	0437	0446	0513	S22	E19	.560	17044	14.6	36	-N		C	0446	80	1.0	
GRP86779	13	0440+9	0450+1	0457	N09	E52	.783	17053	17.1	17	-F				20	.3	D
CULG	13	0440	0451	0501	N09	E53	.794	17053	17.2	21	-F		C	0451	30	.5	
PEKG	13	0449	0450	0453	N10	E52	.783	17053	17.1	4	-F		P	0450	8	.1	D
GRP86780	13	0447+0	0449 0514+0	0517	S26	E48	.837	17060	16.8	30	-N				100	1.8	DJK
PEKG	13	0447	0449	0517	S26	E46	.821	17060	16.6	30	-N		C	0449	38	.5	DK
PEKG	13	0447	0458	0517	S25	E46	.816	17060	16.6	30	-F		P	0458	29	.5	D
PEKG	13	0508	0514	0517	S27	E48	.841	17060	16.8	9	-N		C	0514	84	1.6	E
CULG	13	0512	0514	0520	S28	E49	.853	17060	16.9	8	-B		C	0514	100	1.8	
ABST	13	0512	0514	0516	S26	E50	.852	17060	17.0	4	-N		C	0514	105	1.9	DJ
GRP86781	13	0616+9	0627 0633+6	0728	N16	E29	.499	17048	15.4	72	1N				250	2.9	FJKL
CULG	13	0616	0627	0703D	N18	E30	.521	17048	15.5	47D	1B		C	0627	280	3.1	U
PEKG	13	0619	0635	0700	N17	E29	.503	17048	15.4	41	1N		C	0636	294	3.5	FJ
ABST	13	0621E	0639	0811D	N16	E30	.513	17048	15.5	110D	1B		P	0639	393	4.7	FJK
KANZ	13	0622	0633	0707D	N16	E29	.499	17048	15.4	45D	-B	2					L
BUCA	13	0625	0633	0643D	N18	E28	.494	17048	15.4	18D	1N		C	0633	215	2.5	
CATA	13	0625E	0633	0725	N17	E29	.503	17048	15.4	60D	1F	2	P	0633	281	3.4	
HTPR	13	0626E		0800	N15	E29	.495	17048	15.4	94D	1B		C	0637	200	2.3	E
MANI	13	0634E	0634U	0637D	N15	E25	.438	17048	15.1	3D	-F	1	V		50	.6	F
PURP	13	0649	0655	0746	N16	E30	.513	17048	15.5	57	1B		C		377	4.4	
782 KHAR	13	1006E	1008	1015D	N10	E50	.761	17053	17.2	9D	-F		P	1008	30	.5	D
GRP86783	13	1020	1031+1	1100	N14	E25	.433	17048	15.3	40	-N				120	1.3	E
HTPR	13	1020	1032	1100	N15	E23	.408	17048	15.2	40	-N		C	1032	100	1.0	
KHAR	13	1025E	1031	1038D	N14	E27	.463	17048	15.5	13D	-N		P	1031	150	1.8	E
784 HTPR	13	1102	1110	1115	S27	E42	.795	17060	16.6	13	-F		C	1110	20	.3	
785 HTPR	13	1210	1224	1246	S27	E41	.787	17060	16.6	36	-N		C	1224	40	.5	
GRP86786	13	1246+3	1252+4 1303	1430	S28	E44	.816	17060	16.8	104	2B						EIU
HTPR	13	1246	1303	1430	S29	E40	.792	17060	16.5	104	3B		C	1303	1100	14.4	EIU
RAMY	13	1249	1252	1253D	S26	E44	.806	17060	16.8	4D	1B	3	C		272		
ATHN	13	1250E	1256	1400D	S28	E45	.824	17060	16.9	70D	1B	3	V	1256	270	5.0	
787 RAMY	13	1507	1507	1519	S24	E40	.761	17060	16.6	12	-F	3	C		39		
	13	1741	2139	NO FLARE PATROL													
788 PALE	13	2121	2121U	2137D	N09	E19	.325	17048	15.3	16D	-F	3	C		81		D
789 CULG	13	2200	2215	2235	N12	E47	.727	17053	17.4	35	-F		C	2215	40	.6	
	13	2225	2243	NO FLARE PATROL													

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
790 CULG	14	0007	0012	0023	S15	E88	1.000	17064	20.6	16	-F	C	0012	30		
791 CULG	14	0010	0018	0037	N16	W62	.877	17045	9.4	27	-F	C	0018	10	.2	
792 CULG	14	0153	0155	0220	S23	E46	.807	17061	17.5	27	-F	C	0155	30	.5	
793 PEKG	14	0325	0331	0340	N12	E42	.666	17053	17.3	15	-F	C	0334	63	.9	E
GRP86794	14	0537	0547+5 0648	0702D	S04	W90	1.000	17027	7.5	85	-N					ADGJ
YUNN	14	0537	0547	0549D	S03	W90	1.000	17027	7.5	12D	-N	P		32		A
ABST	14	0549E	0552	0806D	S04	W90	1.000	17027	7.5	137D	1N	P	0552	87		ADJ
KANZ	14	0619E	0648	0702	S05	W90	1.000	17027	7.5	43D	-N	2				G
GRP86795	14	0700+7	0715	0741	S11	W90	1.000	17027	7.5	41	-B					EG
ISTA	14	0700		0752	S17	W90	1.001	17027	7.5	52	1B					GE
KANZ	14	0707	0715	0730	S05	W90	1.000	17027	7.5	23	-N	2				G
796 KANZ	14	0746	0754	0806	S05	W90	1.000	17027	7.6	20	-N	2				G
797 KHAR	14	0835E	0835	0850D	S27	E37	.756	17060	17.1	15D	-F	P	0838	90	1.4	L
798 KHAR	14	0835E	0920	0954D	S05	W90	1.000	17027	7.6	79D	?N	P	0920			HOQ
		IMP.2 NO : HTPR ABST KANZ														
799 KHAR	14	0904E	0906	0908D	S10	E54	.832	17057	18.4	4D	-F	P	0907	40	.8	H
GRP86800	14	0945+1	0946 0952+4	1008	S26	E30	.691	17060	16.7	23	-F			110	1.5	EK
ABST	14	0945	0956	1012	S26	E30	.691	17060	16.7	27	-F	C	0956	131	1.9	E
KHAR	14	0945E	0946	1006D	S25	E32	.699	17060	16.8	21D	-F	P	0950	120	1.7	E
KANZ	14	0946	0954	0958	S26	E31	.699	17060	16.7	12	-F	2				K
HTPR	14	0946	0952	1010	S26	E29	.683	17060	16.6	24	-F	C	0952	70	.8	E
801 KHAR	14	1000E	1003	1007D	N18	E38	.626	17054	17.3	7D	-F	P	1003	30	.4	D
GRP86802	14	1002	1007+1	1017	N16	E58	.843	17067	18.8	15	-F					EH
HTPR	14	1002	1008	1016	N16	E57	.834	17067	18.7	14	-F	C	1008	20	.3	E
KHAR	14	1003E	1007	1018D	N16	E60	.861	17067	18.9	15D	-F	P	1007	55	1.1	EH
803 KHAR	14	1010E	1013	1017D	N10	E41	.652	17053	17.5	7D	-F	P	1013	45	.6	D
804 KHAR	14	1032E	1036	1050D	N16	E90	1.000	17062	21.2	18D	-N	P	1036			H
805 KHAR	14	1100E	1100	1106D	N16	E90	1.000	17062	21.2	6D	-N	P	1100			H
GRP86806	14	1130>9	1144+1	1210	N17	W15	.309	17041	13.4	40	-F			80	.8	E
HTPR	14	1130	1144	1210	N17	W16	.322	17041	13.3	40	-N	C	1144	80	.8	E
CATA	14	1140	1145	1145D	N17	W14	.296	17041	13.4	5D	-F	2 P	1145	84	.9	
807 RAMY	14	1218	1218	1225	S25	E42	.784	17052	17.7	7	-F	3 C		20		
	14	1237	1328	NO FLARE PATROL												
808 HTPR	14	1454	1508	1530	N17	E41	.661	17054	17.7	36	-N	C	1508	20	.3	
GRP86809	14	1533>9		1714D	N15	E86	.995	17062	21.1	101	-N					
HTPR	14	1533		1714D	N14	E85	.994	17062	21.0	101D	-B	C	1610	50		
KANZ	14	1646		1709D	N17	E88	.998	17062	21.3	23D	-N	1				
810 KANZ	14	1638E		1657	S25	E28	.665	17060	16.8	19D	-F	1				
	14	1751	2226	NO FLARE PATROL												
811 CULG	14	2309	2314	2337	S28	E23	.657	17060	16.7	28	1B	C	2314	180	2.3	
812 CULG	15	0004	0018	0037	N20	E27	.491	17059	17.0	33	-F	C	0018	40	.4	
GRP86813	15	0116	0124 0150	0204	S29	E23	.668	17060	16.8	48	?N					
CULG	15	0116	0124	0209	S28	E22	.651	17060	16.7	53	?N	P	0124	180	2.3	
		IMP.S NO : BIGB														

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CULG	15	0144	0150	0158	S30	E25	.692	17060	16.9	14	-N		C	0150	120	1.7	
814 CULG	15	0205	0210	0234	S15	E48	.791	17057	18.7	29	1F		C	0210	120	2.4	
GRP86815	15	0509>9	0510 0550	0604D	N16	E80	.980	17062	21.2	55	-N						DK
ABST	15	0509E	0510	0635	N17	E80	.980	17062	21.2	86D	1N		P	0510	87		DK
CULG	15	0543	0550	0604	N15	E80	.981	17062	21.2	21	-F		C	0550	40		
816 CULG	15	0515	0528U	0553	N20	E25	.465	17059	17.1	38	-F		C	0528	140	1.5	
817 CULG	15	0529	0538	0557	S24	E20	.592	17060	16.7	28	-N		C	0538	120	1.6	T
818 CULG	15	0553	0558	0609	S32	E20	.683	17052	16.7	16	-N		C	0558	140	1.8	T
GRP86819	15	0633+4	0638+6	0702	S27	E20	.627	17060	16.8	29	-N				90	1.1	J
CULG	15	0633	0641	0711	S28	E19	.632	17060	16.7	38	-N	*	C	0641	140	1.8	T
KANZ	15	0636	0644	0700	S25	E20	.604	17060	16.8	24	-N	*					
ABST	15	0637	0639	0706	S27	E20	.627	17060	16.8	29	-N	*	C	0639	87	1.1	DJ
PEKG	15	0638E	0638	0650	S26	E19	.609	17060	16.7	12D	-N	*	P	0638	21	.3	E
PURP	15	0643	0643	0700	S27	E21	.633	17060	16.9	17	-N	*	C				
GRP86820	15	0636+3	0640+2	0647	N13	W79	.978	17034	9.3	11	-N						DJ
KANZ	15	0636	0640	0648	N13	W78	.974	17034	9.4	12	-N	2					
ABST	15	0639	0642	0645	N13	W80	.981	17034	9.3	6	1F		C	0642	114		DJ
821 PEKG	15	0638E	0638	0640	S19	E74	.975	17091	20.8	2D	-F		P	0638	25		E
GRP86822	15	0730+1	0755 0829	0857	S24	E20	.592	17060	16.8	87	1F				200	2.5	EJ
CATA	15	0730	0755	0855	S24	E22	.607	17060	17.0	85	1F	2	C	0755	253	3.3	
KANZ	15	0731		0819D	S23	E21	.588	17060	16.9	48D	-F	2					
WEND	15	0825E		0858D	S25	E17	.583	17060	16.6	33D	1N		V	0828	228	2.7	E
ABST	15	0828	0829	0833D	S26	E20	.615	17060	16.9	5D	1N		P	0829	175	2.2	EJ
823 ABST	15	0842	0847	0926D	N23	W03	.286		15.1	44D	-N		P	0847	87	.9	DJ
GRP86824	15	1219+2	1223+2	1242	S14	E50	.806	17063	19.3	23	-N				80	1.3	D
RAMY	15	1219	1223	1243	S15	E53	.837	17063	19.5	24	-N	3	C		51		
WEND	15	1221E		1234D	S12	E47	.770	17063	19.0	13D	-N		V	1225	114	1.8	D
KANZ	15	1221	1225	1241	S14	E50	.806	17063	19.3	20	-N	2					
GRP86825	15	1545+1	1547+2 1714	1716	S24	E13	.547	17060	16.6	91	-N						E
KANZ	15	1545	1549	1602D	S24	E13	.547	17060	16.6	17D	-N	2					
RAMY	15	1546	1547	1605	S24	E14	.552	17060	16.7	19	-N	3	C		39		
WEND	15	1548E		1745D	S25	E12	.555	17060	16.6	117D	1N		V	1557	228	2.8	E
PALE	15	1708	1714	1716	S24	E15	.558	17060	16.8	8	-F	3	C		33		
826 RAMY	15	1625	1626	1636	N20	E69	.927	17062	20.9	11	-F	3	C		25		
827 HOLL	15	1902E	1923U	2013D	N19	E68	.921	17062	20.9	71D	-F	3	C		15		
828 HOLL	15	2019	2108	2111	N14	E76	.965	17062	21.5	52	-N	3	C		43		
829 HOLL	15	2023	2028	2033	S25	E12	.555	17060	16.7	10	-N	3	C		76		
830 HOLL	15	2111	2114	2133	N19	E68	.921	17062	21.0	22	-N	*	C		37		
GRP86831	15	2145	2146+6	2225D	N15	E36	.592	17067	18.6	40	-N						H
BIGB	15	2145	2150	2225	N15	E35	.578	17067	18.5	40	-N	3	C	2150	130	1.6	
PALE	15	2146E	2146U	2212D	N16	E36	.594	17067	18.6	26D	-F	3	C		46		
CULG	15	2150E	2152	2238	N12	E36	.586	17067	18.6	48D	1B		C	2152	320	3.8	H
CULG	15	2229	2242	2258	N14	E39	.630	17067	18.9	29	-N		C	2242	40	.5	
832 CULG	16	0002U	0028U	0048D	N13	E13	.247	17053	17.0	46D	1F		P	0028	250	2.5	F
	16	0036	0043	NO FLARE PATROL													
	16	0049	0102	NO FLARE PATROL													
833 CULG	16	0118	0122	0208U	S29	E08	.595	17060	16.7	50D	-F		C	0122	80	.9	K

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
834 PALE	16	0220	0221	0237	N20	E65	.901	17062	21.0	17	-F	3	C		38		
GRP86835	16	0228>9	0243+2	0308	N10	W10	.181	17048	15.4	40	?N						F
CULG	16	0228	0245	0320U	N11	W10	.187	17048	15.4	52D	?F		C	0245	560	5.6	F
		IMP.2 IMP.S															
PALE	16	0241	0243	0256	N10	W10	.181	17048	15.4	15	-N	3	C		127		
836 CULG	16	0243	0251	0326	S29	E07	.592	17060	16.6	43	-F		C	0251	80	.9	
837 CULG	16	0307	0308	0318	S19	E56	.873	17091	20.3	11	-F		C	0308	60	1.1	
838 CULG	16	0415	0418	0422	N13	W15	.277	17048	15.1	7	-F		C	0418	120	1.2	
839 CULG	16	0430	0458	0508	N15	E10	.223	17053	16.9	38	?F		C	0458	290	2.9	K
		IMP.1 NO : TACH PEKG															
840 CULG	16	0459	0501	0513	S29	E07	.592	17060	16.7	14	-F		C	0501	40	.5	
841 CULG	16	0559	0602	0609	N20	E67	.915	17062	21.3	10	-F		C	0602	40	.8	
842 CULG	16	0601	0615U	0628U	S25	E03	.527	17060	16.5	27D	-F		C	0615	150	1.7	
843 CULG	16	0608	0609	0614	S12	W06	.336	17051	15.8	6	-F		C	0609	40	.4	
844 CULG	16	0637	0639	0641	S25	E03	.527	17060	16.5	4	-F		C	0639	140	1.6	
845 ABST	16	0644E	0706	0732	N12	E10	.194	17053	17.0	48D	-F		P	0706	87	.9	DJK
	16	1146	1201	NO FLARE PATROL													
846 HOLL	16	1450	1454	1456	N16	E58	.843	17062	21.0	6	-F	3	C		15		
847 HOLL	16	1503	1511	1552	N19	E58	.845	17062	21.0	49	-F	3	C		22		
GRP86848	16	1603+0	1603+1	1631	S24	E14	.553	17061	17.7	28	-F				35	.4	
HOLL	16	1603	1603	1633	S24	E14	.553	17061	17.7	30	-N	3	C		29		
RAMY	16	1603	1604	1628	S24	E14	.553	17061	17.7	25	-F	3	C		44		
849 PALE	16	1806	1808	1822	S24	E03	.512	17060	17.0	16	-F	3	C		59		
850 CULG	16	2221	2225	2233	S12	E42	.716	17064	20.1	12	-F		C	2225	40	.6	
851 CULG	16	2259	2306	2319D	N10	E35	.570	17058	19.6	20D	-F		P	2306	60	.7	
852 CULG	16	2311	2313	2319D	S16	E38	.694	17064	19.8	8D	-F		P	2313	140	2.0	
853 CULG	16	2356	2401	0009U	N17	E23	.418	17067	18.7	13D	?F		C	2401	260	2.6	
		IMP.1 NO : HOLL BIGB															
854 CULG	17	0037	0053U	0140U	S07	E07	.265	17055	17.6	63D	?F		C	0053	580	5.8	F
		IMP.2 NO : BIGB HOLL PEKG															
	17	0225	0233	NO FLARE PATROL													
	17	0255	0326	NO FLARE PATROL													
GRP86855	17	0338E	0341+4	0358	S24	W06	.519	17060	16.7	20	-F						F
PALE	17	0338E	0341U	0345	S24	W05	.517	17060	16.8	7D	-F	3	C		43		
CULG	17	0339E	0345U	0410U	S24	W07	.522	17060	16.6	31D	1F		P	0345	210	2.4	F
856 CULG	17	0344	0439U	0501D	S35	W15	.695		16.0	77D	?F		P	0439	300	3.9	SIK
		IMP.1 NO : PEKG TACH															
GRP86857	17	0349+1	0350+0	0359	S12	W18	.437	17051	15.8	10	-N						E
PEKG	17	0349	0350	0353	S13	W18	.448	17051	15.8	4	-N		C	0350	50	.6	E
CULG	17	0350	0350	0405	S12	W18	.437	17051	15.8	15	-N		C	0350	120	1.3	
858 CULG	17	0353	0420U	0501D	S30	W35	.763	17044	14.5	68D	-F		P	0420	60	.9	
GRP86859	17	0434+0	0439+1	0446	S15	E32	.622	17063	19.6	12	-N						E
PEKG	17	0434	0439	0442	S15	E28	.577	17063	19.3	8	-N		C	0439	42	.5	E
CULG	17	0434	0440	0450	S16	E36	.673	17063	19.9	16	-N		C	0440	100	1.2	

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860 PEKG	17	0444	0449	0508	N12	W27	.456	17048	15.2	24	-F		C	0449	63	.7	E
861 CULG	17	0456	0458	0501D	S13	E38	.677	17064	20.1	5D	-F		P	0458	80	1.0	
GRP86862	17	0604+2	0608+1	0621	N13	W27	.459	17048	15.2	17	-N				100	1.1	DJ
CULG	17	0604E	0608	0615D	N13	W27	.459	17048	15.2	11D	-N		P	0608	120	1.3	
ABST	17	0606	0609	0621	N14	W27	.462	17048	15.2	15	-N		C	0609	87	1.0	DJ
863 ISTA	17	0738		0805	N19	E52	.788	17062	21.2	27	-F						E
864 RAMY	17	1219E	1229	1232	N12	W29	.486	17048	15.3	13D	-F	3	C		29		
865 RAMY	17	1250	1250	1259	N10	E29	.483	17058	19.7	9	-F	3	C		36		
866 RAMY	17	1326	1334	1336	S17	E26	.573	17068	19.5	10	-F	3	C		60		
867 RAMY	17	1554	1557	1609	S12	E32	.601	17064	20.1	15	-F	3	C		40		
868 RAMY	17	1555	1556	1605	N12	E26	.441	17058	19.6	10	-F	3	C		24		
869 RAMY	17	1710	1710	1730	S13	E33	.619	17064	20.2	20	-F	3	C		21		
870 RAMY	17	1752	1753	1759	N11	W34	.557	17048	15.2	7	-F	3	C		30		
GRP86871	17	1832+1	1836 1845	1900	S12	E30	.577	17064	20.0	28	-F						
RAMY	17	1832	1836	1851	S12	E30	.577	17064	20.0	19	-F	*	C		41		
BIGB	17	1833	1845	1908	S13	E31	.596	17064	20.1	35	-F	*	C	1845	60	.7	
GRP86872	17	1832	1846+3 1905	1919	N10	E24	.406	17058	19.6	47	-N				60	.7	
BIGB	17	1832	1846	1943	N09	E23	.389	17058	19.5	71	-N	3	C	1846	60	.7	
PALE	17	1845E	1849U	1919D	N11	E24	.408	17058	19.6	34D	-F	3	C		83		
RAMY	17	1847	1849	1853	N10	E23	.390	17058	19.5	6	-N	3	C		28		
RAMY	17	1859	1905	1914	N11	E25	.424	17058	19.7	15	-F	3	C		34		
873 BIGB	17	2050	2102	2115	N31	W90	.998	17090	11.1	25	1F	3	C	2102	100		
874 CULG	17	2214	2216 IMP.1 NO : BIGB PALE	2220D	S25	W18	.591	17060	16.6	6D	?F		P	2216	200	2.4	
875 CULG	17	2253	2300	2312	N15	W40	.644	17048	15.0	19	-F		C	2300	80	1.0	
GRP86876	17	2254+1	2255+1	2302	S24	W19	.586	17060	16.5	8	-F				35	.4	
PALE	17	2254	2255	2303	S24	W18	.579	17060	16.6	9	-F	2	C		26		
CULG	17	2255	2256	2300	S25	W20	.605	17060	16.5	5	-F		C	2256	40	.5	
877 CULG	17	2324	2327	2338	N15	W40	.644	17048	15.0	14	-F		C	2327	80	1.0	
878 CULG	17	2327	2333	2347	N10	E20	.343	17058	19.5	20	-N		C	2333	150	1.5	F
879 CULG	18	0038	0046	0058	S13	E66	.930	17065	23.0	20	-F		C	0046	40	1.0	G
GRP86880	18	0150+4	0153+3	0205	N10	E18	.311	17058	19.4	15	-N						F
CULG	18	0150	0155	0210	N09	E18	.308	17058	19.4	20	-N		C	0155	120	1.3	T
PEKG	18	0151	0153	0156D	N10	E19	.327	17058	19.5	5D	1N		P	0156	210	2.3	F
PALE	18	0154	0156	0200	N11	E18	.314	17058	19.4	6	-F	3	C		25		
881 PEKG	18	0156E	0156	0156D	N18	E40	.650	17062	21.1		-N		P	0156	42	.6	E
GRP86882	18	0435+6	0442+5	0457	N09	E16	.276	17058	19.4	22	-N				45	.5	E
PEKG	18	0435	0442	0450	N10	E18	.311	17058	19.5	15	-N		C	0442	25	.3	E
CULG	18	0441	0447	0503	N09	E15	.259	17058	19.3	22	-N		C	0447	60	.6	T
883 CULG	18	0509	0535	0542	S15	E27	.566	17064	20.2	33	-F		C	0535	70	.8	
884 ABST	18	0516	0522	0532	N13	W41	.654	17048	15.1	16	-F		C	0522	131	1.7	FJ
885 CULG	18	0523	0526	0535	S11	W22	.473	17056	16.6	12	-N		C	0526	50	.6	G
886 ABST	18	0529E	0529	0536	N08	E18	.307	17058	19.6	7D	-N		P	0529	131	1.4	EJ

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
887 PEKG	18	0549	0600	0605	N09	E18	.308	17058	19.6	16	-N	C	0600	50	.5	E
GRP86888	18	0552>9	0600 0609	0648	N16	E37	.607	17062	21.0	56	-F					DK
PEKG	18	0552	0600	0640	N17	E39	.635	17062	21.2	48	-F	* C	0600	25	.3	D
ABST	18	0602	0609	0655	N16	E36	.594	17062	21.0	53	-N	* C	0609	87	1.2	DK
GRP86889	18	0555+6	0600+6 0634+1	0640	S09	W01	.272	17057	18.2	45	-F					EJK
PEKG	18	0555	0600	0640	S09	E01	.272	17057	18.3	45	-F	C	0600	17	.2	DK
PEKG	18	0555	0635	0640	S09	E00	.272	17057	18.2	45	-N	C	0635	38	.4	E
CULG	18	0601	0606	0613	S08	W02	.257	17057	18.1	12	-F	C	0606	40	.4	
ABST	18	0626	0634	0700	S10	W01	.289	17057	18.2	34	-F	C	0634	131	1.4	EJ
890 CULG	18	0701	0704U	0705D	S13	E24	.515	17064	20.1	4D	-F	P	0704	20	.2	
GRP86891	18	0720>9	0733 0755	0910D	N17	W06	.204	17054	17.9	110	-N					EJ
ABST	18	0720	0733	0757D	N17	W06	.204	17054	17.9	37D	-N	P	0733	174	1.8	EJ
CATA	18	0735	0755	0910D	N17	W06	.204	17054	17.9	95D	-F 2	P	0755	140	1.5	
892 ABST	18	0733	0737	0750	S13	E24	.515	17064	20.1	17	-F	C	0737	87	1.4	DJ
GRP86893	18	0852+3	0853 0900	0913	N09	E16	.276	17058	19.6	21	-N					EJ
ABST	18	0852E	0853	0913	N08	E18	.307	17058	19.7	21D	-N	P	0853	174	1.8	EJ
CATA	18	0855	0900	0910D	N10	E15	.262	17058	19.5	15D	-F 2	P	0900	140	1.5	
GRP86894	18	0910	0918 0928	0958D	S09	W02	.274	17057	18.2	48	-F					EJ
ABST	18	0910	0918	0958D	S10	W01	.289	17057	18.3	48D	-F	P	0918	131	1.4	EJ
KHAR	18	0925E	0928	0943D	S08	W03	.260	17057	18.2	18D	-F	P	0928	50	.5	E
895 KHAR	18	0925E	0925	0931D	N10	E18	.311	17058	19.7	6D	-N	P	0925	30	.3	D
	18	1048	1054	NO FLARE PATROL												
896 RAMY	18	1248	1249	1315	N09	W47	.726	17048	15.0	27	-B 3	C		78		D
897 RAMY	18	1331	1334	1354	N10	E11	.197	17058	19.4	23	-N 3	C		76		
898 RAMY	18	1420	1420	1429	S09	W03	.276	17057	18.4	9	-N 3	C		46		
	18	1551	1701	NO FLARE PATROL												
	18	1945	2115	NO FLARE PATROL												
899 PALE	18	2010E	2010U	2016	N12	E09	.179	17058	19.5	6D	-F 3	C		37		D
900 CULG	18	2209	2211	2219	S28	W50	.861	17044	15.2	10	-F	C	2211	40	.8	
901 HOLL	18	2210	2218	2219	N22	E31	.553	17062	21.2	9	-F 3	C		26		
902 CULG	18	2303	2304	2318	N12	W30	.501	17053	16.7	15	-F	C	2304	20	.2	H
903 CULG	19	0035	0051	0100	N13	E06	.149	17058	19.5	25	-F	C	0051	80	.8	
904 CULG	19	0043	0045	0105	S12	E10	.363	17064	19.8	22	-N	C	0045	40	.4	K
905 CULG	19	0045	0049	0105	N10	W57	.833	17048	14.8	20	-F	C	0049	40	.7	
906 CULG	19	0106	0118	0126	N05	W60	.863	17049	14.5	20	-F	C	0118	40	.7	
907 CULG	19	0114	0126	0150U	S31	W51	.880	17044	15.2	36D	-F	C	0126	80	1.6	
908 CULG	19	0122	0123	0135	N14	W22	.387	17053	17.4	13	-F	C	0123	130	1.3	F
909 CULG	19	0127	0127	0133	N19	E19	.377	17062	20.5	6	-F	C	0127	60	.7	
910 CULG	19	0209	0213D	0213D	S31	W51	.880	17044	15.3	4D	-N	P	0213	40	.8	
911 VORO	19	0221	0222	0225	N19	E20	.390	17062	20.6	4	-F	C	0222	108	1.2	DJ

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86912	19	0226+0	0228+0	0235	S08	W14	.348	17057	18.1	9	-F				30	.3	
MANI	19	0226	0228	0236	S08	W15	.359	17057	18.0	10	-F	2	P		33	.3	
PALE	19	0226E	0228	0233	S08	W13	.337	17057	18.1	7D	-F	3	C		34		
	19	0332	0339	NO FLARE PATROL													
	19	0603	0604	NO FLARE PATROL													
GRP86913	19	0643E		0703	S29	W52	.879	17044	15.4	20	-F						
WEND	19	0643E		0700	S28	W53	.882	17044	15.3	17D	-F		V		105	2.0	
KANZ	19	0646E		0705	S30	W52	.883	17044	15.4	19D	-N	1					
914 KANZ	19	0654	0713	0729	N19	E24	.443	17062	21.1	35	-N	1					
915 KANZ	19	0801	0805	0816	S08	W17	.383	17057	18.1	15	-F	2					
GRP86916	19	0815	0819	0824	S14	E05	.365	17068	19.7	9	-F						D
YUNN	19	0815	0819	0822	S14	E04	.361	17068	19.6	7	-F		C		96	1.1	
KHAR	19	0822E	0822	0826D	S14	E06	.369	17068	19.8	4D	-N		V	0823			D
GRP86917	19	0815+1	0819+1	0836	S22	E22	.588	17091	21.0	21	-N						D
YUNN	19	0815	0819	0824	S22	E22	.588	17091	21.0	9	-N		C		113	1.4	
KANZ	19	0816	0820	0836	S21	E23	.585	17091	21.1	20	-F	2					
KHAR	19	0822E	0822	0855D	S22	E22	.588	17091	21.0	33D	-N		V	0822			D
GRP86918	19	0820+6	0826+2	0906	S08	W16	.371	17057	18.1	46	-N				170	1.8	EHO
WEND	19	0820E	0828	0904	S08	W16	.371	17057	18.1	44D	-N		V		190	2.0	
KANZ	19	0824	0828	0916	S09	W17	.394	17057	18.1	52	-N	2					
YUNN	19	0825	0828	0847D	S07	W16	.360	17057	18.2	22D	-N		P		113	1.3	
KHAR	19	0826	0826	0906D	S08	W18	.395	17057	18.0	40D	1N		P	0832	220	2.5	EHO
919 KHAR	19	0826E		0855D	S28	W57	.907	17044	15.1	29D	-N		P	0832	90	2.0	HO
920 KHAR	19	0830E	0830	0840D	S11	E82	.994	17075	25.5	10D	-F		P	0830			DH
921 KHAR	19	0834E	0835	0855D	S23	W39	.748	17060	16.4	21D	-F		P	0834			D
GRP86922	19	0926+2	0929	0932D	N18	E23	.423	17062	21.1	6	-F						
YUNN	19	0926	0929	0932	N18	E23	.423	17062	21.1	6	-F		C		161	1.8	
KANZ	19	0928		1015	N19	E24	.443	17062	21.2	47	-N	2					
GRP86923	19	0942+3	0943+4	1004	S21	E22	.577	17091	21.1	22	1N				170	2.1	H
KHAR	19	0942	0947	0952D	S22	E22	.588	17091	21.1	10D	-N		P	0945	160	2.0	H
KANZ	19	0943	0943	1007	S21	E23	.585	17091	21.1	24	-N	2					
YUNN	19	0944	0944	0952D	S21	E21	.568	17091	21.0	8D	1N		P		193	2.5	
CATA	19	0945	0945	1000	S22	E23	.596	17091	21.1	15	1F	2	C	0945	169	2.2	
924 KHAR	19	1020E		1052D	S28	W57	.907	17044	15.2	32D	-F		P	1040	80	1.9	
925 KHAR	19	1025E	1027	1052D	N08	E03	.056	17058	19.7	27D	-F		V	1027			L
926 KHAR	19	1036E	1037	1045D	S11	E81	.992	17075	25.5	9D	-F		V	1037			D
GRP86927	19	1130+1	1135+0	1150	S08	W20	.420	17057	18.0	20	-F						
CATA	19	1130	1135	1145D	S08	W20	.340	17057	18.0	15D	-F	2	P	1135	84	1.0	
KANZ	19	1131	1135	1150	S08	W20	.420	17057	18.0	19	-N	2					
928 KANZ	19	1318	1318	1340	N19	E18	.364	17062	20.9	22	-N	3					D
929 RAMY	19	1450	1451	1506	S11	W57	.861	17051	15.3	16	-F	3	C		30		
930 RAMY	19	1450	1451	1506	S30	W57	.913	17044	15.3	16	-F	3	C		30		
GRP86931	19	1520+4	1531	1547	N19	E19	.377	17062	21.1	27	1N						
WEND	19	1520E		1538D	N19	E20	.390	17062	21.1	18D	1N		V		230	2.7	
RAMY	19	1524	1531	1547	N19	E18	.364	17062	21.0	23	1N	3	C		261		
GRP86932	19	2227+2	2229+3	2243D	N19	E16	.338	17062	21.1	16	-F				80	.9	D
PALE	19	2227	2229	2243	N20	E16	.348	17062	21.1	16	-F	3	C		68		D
BIGB	19	2229	2232	2347	N18	E17	.342	17062	21.2	78	-N	3	C	2232	100	1.0	
933 PEKG	20	0145E	0146	0146D	N17	E17	.333	17062	21.3	1D	-N		P	0146	29	.3	E

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934	PEKG	20	0145E	0146	0223	S08	W27	.511	17057	18.0	38D	-N		P	0146	92	1.1	E
935	PEKG	20	0145E	0146	0146D	S27	W67	.957	17044	15.0	1D	-B		P	0146	17		D
936	PEKG	20	0145E	0146	0146D	S24	W40	.763	17060	17.1	1D	-F		P	0146	63	1.2	E
937	PEKG	20	0305	0311	0316	S29	W68	.964	17044	15.0	11	-F		C	0311	25		E
GRP86938		20	0309	0311+2	0322	S09	W29	.544	17057	18.0	13	-N				110	1.3	E
	PEKG	20	0309	0311	0322	S09	W29	.544	17057	18.0	13	-B		C	0311	126	1.5	E
	TACH	20	0310E	0313	0314D	S09	W30	.557	17057	17.9	4D	-N		C	0313	97	1.2	E
939	PEKG	20	0322	0326	0332	N14	E52	.783	17069	24.0	10	1B		C	0326	139	2.3	F
940	PEKG	20	0355	0357	0358	N29	W85	.991		13.8	3	-F		C	0357	13		D
941	PEKG	20	0355	0357	0405	S09	W29	.544	17057	18.0	10	-B		C	0357	84	1.0	DJ
942	PEKG	20	0442	0447	0452	N18	E12	.278	17062	21.1	10	-N		C	0447	177	1.9	F
GRP86943		20	0450	0455 0520	0540	N15	E50	.762	17069	24.0	50	-B						EJK
	PEKG	20	0450	0520	0540	N15	E49	.751	17069	23.9	50	-B		C	0520	63	1.0	E
	PEKG	20	0450	0455	0540	N15	E51	.773	17069	24.0	50	-N		C	0455	59	.9	JK
GRP86944		20	0450+1	0455+4	0540D	S25	W50	.849	17060	16.5	50	-N				80	1.5	JK
	TACH	20	0450	0459	0620D	S25	W51	.857	17060	16.4	90D	1F	*	C	0459	106	2.1	E
	PEKG	20	0451	0455	0540	S25	W50	.849	17060	16.5	49	-N	*	C	0455	55	1.1	DJK
945	PEKG	20	0451	0455	0510	N13	W23	.398	17067	18.5	19	-N		C	0455	63	.7	F
946	PEKG	20	0511	0512	0514	S08	W30	.550	17057	18.0	3	-N		C	0512	126	1.6	E
GRP86947		20	0514+2	0536 0558+1	0642	S24	E08	.527	17091	20.8	88	1N						EIJK
	TACH	20	0514	0558	0620D	S24	E06	.521	17091	20.7	66D	2F		C	0558	884	10.5	SU
	PEKG	20	0516	0520	0602	S26	E11	.567	17091	21.0	46	-N		C	0520	134	1.7	EJ
	PEKG	20	0525	0536	0625	S23	E07	.509	17091	20.8	60	1N		C	0536	252	3.1	FIKU
	PEKG	20	0537	0559	0632	S21	E08	.484	17091	20.8	55	1B		C	0559	378	4.5	FIU
	PEKG	20	0537	0547	0632	S22	E07	.495	17091	20.8	55	1B		C	0547	357	4.3	FIU
	YUNN	20	0538E	0538	0538D	S26	E10	.563	17091	21.0		-N		P		129	1.6	E
	PEKG	20	0544	0602	0642	S23	E08	.513	17091	20.8	58	1N		C	0602	273	3.3	FIU
948	PEKG	20	0537	0541	0559	S26	W71	.971	17044	14.9	22	-F		C	0541	8		E
949	YUNN	20	0538E	0538	0538D	S08	W31	.563	17057	17.9		-N	*	P		113	1.4	
950	PEKG	20	0547E	0547	0602	N15	E49	.751	17069	23.9	15D	?B		C	0547	134	2.1	F
				IMP.1 NO : TACH														
GRP86951		20	0547	0554 0559+3	0605	N12	W73	.951	17048	14.8	18	-F						EK
	PEKG	20	0547	0554	0602	N12	W73	.951	17048	14.8	15	-F		C	0547	8		DK
	PEKG	20	0547	0559	0602	N12	W73	.951	17048	14.8	15	-F		C				
	PEKG	20	0559	0602	0605	N12	W72	.946	17048	14.8	6	-F	*	C	0602	21		E
GRP86952		20	0555+0	0558+1	0638	S12	W01	.324	17064	20.2	43	-N				150	1.6	
	PEKG	20	0555	0559	0630	S11	W01	.307	17064	20.2	35	-B		C	0559	177	1.9	F
	TACH	20	0555E	0558	0620D	S13	W02	.341	17064	20.1	25D	-N		C	0558	133	1.4	E
	CATA	20	0605E	0605	0645	S12	W01	.324	17064	20.2	40D	-F	2	P	0605	140	1.5	
953	PEKG	20	0556	0559	0630	S07	W30	.544	17057	18.0	34	-B		C	0559	147	1.8	EJ
954	PEKG	20	0559	0600	0602	S27	W71	.972	17044	14.9	3	-F	*	C	0602	17		D
955	CATA	20	0605E	0605	0645	S23	W09	.517	17068	19.6	40D	?F	2	P	0605	337	4.1	
				IMP.1 NO : PEKG TACH														
956	PEKG	20	0659	0702	0718	N11	W72	.946	17048	14.9	19	-F		C	0702	25		EK

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GRP86957	20	0735E	0735 0743+1	0749	N12	W73	.951	17048	14.8	14	-N				35		
PEKG	20	0735E	0744	0748	N12	W73	.951	17048	14.8	13D	-B		C	0744	21		E
PEKG	20	0735E	0735	0748	N11	W73	.951	17048	14.8	13D	-N		C	0735	46		E
KHAR	20	0742E	0743	0749D	N13	W73	.951	17048	14.8	7D	-F		P	0746	50		D
958 PEKG	20	0736	0744	0744D	N18	E09	.245	17062	21.0	8D	-N		P	0744	46	.5	E
GRP86959	20	0740E	0742+3	0800	N13	E46	.715	17069	23.8	20	-B				110	1.6	EHO
KHAR	20	0740E	0742	0803D	N13	E46	.715	17069	23.8	23D	-N		P	0746	140	2.0	EHO
ATHN	20	0742E	0745U	0800	N13	E46	.715	17069	23.8	18D	-B	3	V	0745	64	1.0	
PEKG	20	0744E	0744	0748	N14	E46	.716	17069	23.8	4D	-B		C	0744	109	1.6	E
960 PEKG	20	0744E	0744	0744D	S28	W72	.977	17044	14.9		-F		P	0744	13		E
GRP86961	20	0917+2	0918 0924	0932	N12	W14	.254	17058	19.3	15	-N						
YUNN	20	0917	0918	0930	N12	W13	.239	17058	19.4	13	-N		C		129	1.4	
PEKG	20	0919	0924	0932	N11	W14	.249	17058	19.3	13	-B		P	0924	168	1.8	F
KHAR	20	0926E	0926	0936D	N12	W14	.254	17058	19.3	10D	-N		P	0926	65	.7	E
962 KHAR	20	0926E		0936D	N22	E12	.327	17062	21.3	10D	-N		P	0929	110	1.2	
963 KHAR	20	0926E		0936D	N11	W47	.726	17053	16.9	10D	-F		P	0936	90	1.3	D
964 KHAR	20	0926E	0926	0936D	N14	E44	.692	17069	23.7	10D	-F		P	0926	45	.6	D
965 CATA	20	1035	1040	1050	N14	E48	.739	17069	24.0	15	1F	2	C	1040	169	2.6	
966 RAMY	20	1144	1145	1153	N14	E43	.680	17069	23.7	9	-F	3	C		18		
967 HOLL	20	1942	1944	1949	N20	E03	.233	17062	21.0	7	-F	3	C		45		
	20	2043	2151	NO FLARE PATROL													
	20	2210	2223	NO FLARE PATROL													
968 VORO	20	2320	2323	2346	N16	W33	.553	17067	18.5	26	-F		C	2323	45	.5	J
GRP86969	21	0005+1	0009+1	0022	N18	E02	.196	17062	21.2	17	-F				60	.6	EJ
PEKG	21	0005	0010	0014	N19	E01	.210	17062	21.1	9	-N		C	0010	71	.7	E
VORO	21	0006	0009	0030	N18	E03	.199	17062	21.2	24	-F		C	0009	45	.5	EJ
970 PEKG	21	0010E	0010	0014	N13	E37	.601	17069	23.8	4D	-F		P	0010	42	.5	D
971 VORO	21	0028	0029	0033	N16	W35	.580	17067	18.4	5	-N		C	0029	72	.9	DH
972 VORO	21	0036	0038	0042	N12	E80	.981	17123	27.0	6	?F		C	0038	72		D
			IMP.1 NO : HOLL PEKG														
GRP86973	21	0112+2	0122+6	0155	S17	E25	.565	17065	22.9	43	-F				70	.8	LU
PEKG	21	0112	0122	0144	S17	E25	.565	17065	22.9	32	-N		C	0122	76	.9	U
VORO	21	0114	0128	0205	S18	E25	.574	17065	22.9	51	-F		C	0128	63	.8	L
974 PEKG	21	0136	0138	0140	N15	E35	.577	17069	23.7	4	-N		C	0138	63	.8	F
975 PEKG	21	0636	0641	0649	N14	E32	.533	17069	23.7	13	-N		C	0641	92	1.1	F
GRP86976	21	0636+4	0638+3	0654	N15	W37	.604	17067	18.5	18	-N						F
PEKG	21	0636	0641	0655	N15	W37	.604	17067	18.5	19	-B	*	C	0641	147	1.9	F
KANZ	21	0638E	0638	0654	N14	W38	.616	17067	18.4	16D	-N	*					
CATA	21	0640	0640	0650	N15	W37	.604	17067	18.5	10	-F	*	C	0640	56	.7	
GRP86977	21	0649+5	0651 0658	0710	N19	W07	.240	17062	20.8	21	-F						FU
PEKG	21	0649	0651	0702	N20	W07	.255	17062	20.8	13	-N		C	0651	109	1.2	FU
KANZ	21	0654	0658	0717	N18	W07	.226	17062	20.8	23	-F	2					
978 PEKG	21	0714	0717	0736	N16	W38	.619	17067	18.5	22	-N		C	0724	38	.5	E

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86979	21	0717>9	0723 0735	0751	N18	W04	.204	17062	21.0	34	-F						E
PEKG	21	0717	0723	0753	N19	W07	.240	17062	20.8	36	-N	*	C	0724	168	1.8	E
KANZ	21	0731	0735	0749	N18	W01	.193	17062	21.2	18	-F	*					
980 PEKG	21	0723	0724	0728E	N11	W59	.851	17053	16.9	5D	-N		P	0724	63	1.3	E
GRP86981	21	0758+3	0801+1	0805	N16	W39	.632	17067	18.4	7	-N						D
PEKG	21	0758	0802	0804	N16	W39	.632	17067	18.4	6	-B		C	0802	46	.6	D
ISTA	21	0800		0805	N16	W38	.619	17067	18.5	5	-N						D
KANZ	21	0801	0801	0805	N15	W39	.630	17067	18.4	4	-N	2					D
GRP86982	21	0809+1	0817+3	0833	S25	W64	.939	17060	16.5	24	-N				60		E
KANZ	21	0809	0817	0833	S27	W65	.948	17060	16.5	24	-B	2					
CATA	21	0810	0820	0840	S24	W64	.937	17060	16.5	30	1F	2	C	0820	84		
PEKG	21	0810	0817	0827	S25	W64	.939	17060	16.5	17	-N		P	0817	42		E
GRP86983	21	0840+9	0847 0902	0945	N19	W06	.232	17062	20.9	65	-N						E
PEKG	21	0840	0847	0850	N20	W02	.229	17062	21.2	10	-N	*	C	0846	147	1.6	F
KANZ	21	0849		0953	N19	W08	.249	17062	20.8	64	-N	*					E
PEKG	21	0855	0902	0936	N20	W08	.263	17062	20.8	41	-N	*	C	0902	143	1.5	E
GRP86984	21	0841	0846+3	0855	N09	E67	.916	17076	26.4	14	-F						D
KANZ	21	0841	0849	0901	N10	E67	.915	17076	26.4	20	-N	2					
PEKG	21	0845E	0846	0849	N09	E67	.916	17076	26.4	4D	-F		P	0846	13		D
GRP86985	21	0945+5	0949+6 1017	1115	N08	E66	.909	17076	26.4	90	-N				50		D
YUNN	21	0945E	0950	0952D	N05	E64	.896	17076	26.2	7D	-N		P		48	1.1	
PEKG	21	0946	0949	1005	N08	E67	.916	17076	26.4	19	-N		C	0949	17		D
KANZ	21	0949	1017	1150	N10	E67	.915	17076	26.4	121	-B	3					
CATA	21	0950	0955	1140D	N10	E65	.901	17076	26.3	110D	2F	2	P	0955	281	6.7	
ATHN	21	0950E	0955U	1037	N07	E66	.910	17076	26.4	47D	-B	3	V	0955	48	1.1	
YUNN	21	1036E	1037	1053	N07	E65	.902	17076	26.3	17D	-N		P		80	1.9	
ATHN	21	1116E	1117U	1202	N09	E69	.929	17076	26.6	46D	-B	3	S	1117	80	2.0	
GRP86986	21	1033+3	1037	1053D	N19	W08	.249	17062	20.8	20	-F						
KANZ	21	1033		1126	N19	W08	.249	17062	20.8	53	-F	2					
YUNN	21	1036	1037	1053	N19	W08	.249	17062	20.8	17	1F		C		193	2.1	
987 KANZ	21	1146	1146	1158	N21	W04	.253	17062	21.2	12	-F	2					
GRP86988	21	1305+0	1311+1	1332	N13	E26	.443	17069	23.5	27	-F						L
RAMY	21	1305	1311	1323	N14	E26	.446	17069	23.5	18	-F	3	C		99		
KANZ	21	1305	1312	1340	N13	E26	.443	17069	23.5	35	-N	2					L
GRP86989	21	1310+2	1312+2	1334	N11	E64	.893	17076	26.3	24	-B						
RAMY	21	1310	1314	1331	N12	E64	.893	17076	26.3	21	1N	3	C		149		
KANZ	21	1312	1312	1336	N10	E64	.893	17076	26.3	24	-B	3					
GRP86990	21	1335+9	1350+3	1427	N19	W10	.268	17062	20.8	52	-B				120	1.3	D
HOLL	21	1335E	1350	1423	N19	W08	.249	17062	21.0	48D	-B	3	C		125		D
RAMY	21	1344	1353	1427	N18	W10	.255	17062	20.8	43	-B	3	C		123		D
KANZ	21	1344	1352	1428	N19	W10	.268	17062	20.8	44	-N	2					
GRP86991	21	1421+3	1427	1437D	N12	E65	.900	17076	26.5	16	-F						L
RAMY	21	1421	1427	1437	N13	E66	.907	17076	26.5	16	-F	3	C		49		
KANZ	21	1424		1547	N11	E64	.893	17076	26.4	83	-N	2					L
992 KANZ	21	1515	1543	1559	N19	E80	.979	17124	27.6	44	-N	2					L
GRP86993	21	1647+0	1651+1	1702	N11	E62	.877	17076	26.3	15	-N						
KANZ	21	1647	1651	1659D	N10	E62	.877	17076	26.3	12D	-B	3					
RAMY	21	1647	1652	1702	N12	E62	.877	17076	26.3	15	-N	3	C		79		
GRP86994	21	1736+4	1740+4	1813	N14	E64	.892	17076	26.5	37	-N						D
HOLL	21	1736	1743	1818	N09	E63	.886	17076	26.5	42	-N	4	C		104		
RAMY	21	1740	1740	1813	N14	E64	.892	17076	26.5	33	-N	3	C		42		
PALE	21	1740	1744	1808	N14	E66	.907	17076	26.7	28	-N	3	C		90		D

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GRP86995	21	1843+2	1849+0 1855+0	1917	N12	E62	.877	17076	26.4	34	1B					D
RAMY	21	1843	1855	1914	N13	E61	.868	17076	26.4	31	2B	3 C		356		
HOLL	21	1843	1849	1928	N13	E65	.900	17076	26.7	45	2B	3 C		394		D
PALE	21	1845	1855	1914	N12	E62	.877	17076	26.4	29	1B	2 C		248		
BIGB	21	1845	1849	1919	N10	E62	.877	17076	26.4	34	-B	3 C	1849	80	1.8	
GRP86996	21	1854+5	1900+6	1941	N19	W11	.278	17062	21.0	47	1B			430	4.5	
HOLL	21	1854	1902	1947D	N20	W14	.324	17062	20.7	53D	2B	3 C		569		
BIGB	21	1855	1906	1941	N19	W11	.278	17062	21.0	46	-B	3 C	1906	130	1.4	
PALE	21	1856	1904	1937	N19	W12	.289	17062	20.9	41	2B	2 C		501		
RAMY	21	1859	1900	1920D	N18	W10	.255	17062	21.0	21D	1B	3 C		373		
997 PALE	21	2002	2020	2037	N20	W08	.263	17062	21.2	35	-F	3 C		86		D
998 MANI	21	2354E	2354U	0001D	N18	W17	.341	17062	20.7	7D	-N	1 V		80	.9	F
999 MANI	22	0025E	0026	0035D	N08	E60	.861	17076	26.5	10D	-F	1 V		20	.4	
0 MANI	22	0155E	0157U	0202D	N10	W70	.935	17053	16.8	7D	-F	1 V		23	.5	
1 MANI	22	0303E	0303U	0307D	N09	E61	.869	17076	26.7	4D	-F	1 V		30	.6	
	22	0311	0320	NO FLARE PATROL												
2 TACH	22	0348	0401	0402	N16	E72	.945	17124	27.6	14	-N	C	0401	26		FG
3 TACH	22	0407	0414	0420	S12	W52	.820	17057	18.3	13	-N	C	0414	26	.3	D
4 ABST	22	0500	0503	0510	N12	W38	.613	17058	19.4	10	-F	C	0503	87	1.1	DJ
5 ABST	22	0512	0514	0520	N12	E19	.332	17069	23.6	8	-F	C	0514	87	.9	DJ
GRP87006	22	0515+1	0520+2	0551	N09	E58	.843	17076	26.6	36	1B					FJ
TACH	22	0515	0520	0542	N10	E59	.851	17076	26.6	27	1B	C	0520	141	2.7	F
ABST	22	0516	0522	0600	N08	E58	.843	17076	26.6	44	2N	C	0522	306	5.7	FJ
GRP87007	22	0610>9	0625+1	0640	N09	E55	.814	17076	26.4	30	-N			60	1.0	D
ISTA	22	0610		0630	N09	E57	.833	17076	26.5	20	-N					D
CATA	22	0620	0625	0640	N10	E55	.813	17076	26.4	20	-F	2 C	0625	56	1.0	
ATHN	22	0625E	0626U	0645	N08	E52	.783	17076	26.2	20D	-B	3 V	0626	64	1.0	
8 ABST	22	0735	0737	0751	N19	W19	.376	17062	20.9	16	-F	C	0737	87	.9	DJ
GRP87009	22	0735+0	0747	0801	N10	E56	.823	17076	26.5	26	-F					D
KANZ	22	0735	0747	0803	N11	E56	.823	17076	26.5	28	-N	3				
ISTA	22	0735		0758	N10	E56	.823	17076	26.5	23	-F					D
GRP87010	22	0826+4	0829+4	0839	N09	E53	.793	17076	26.3	13	1N			200	3.3	EJ
YUNN	22	0826	0830	0835	N08	E53	.794	17076	26.3	9	1N	* C		241	4.3	
ABST	22	0827	0829	0837	N09	E57	.835	17076	26.6	10	1N	C	0829	219	3.8	EJ
KANZ	22	0827	0831	0839	N10	E53	.793	17076	26.3	12	1B	*				
CATA	22	0830	0830	0840	N10	E53	.793	17076	26.3	10	1F	* C	0830	225	3.8	
ATHN	22	0832E	0833U	0845	N09	E51	.772	17076	26.2	13D	-B	* V	0833	127	2.1	
GRP87011	22	0911+4	0915+1 0922	0955	N12	E57	.833	17076	26.7	44	1F			150	2.8	EK
KANZ	22	0911	0922	1002	N12	E57	.833	17076	26.7	51	-F	3				
ABST	22	0914	0916	0930	N19	E57	.835	17076	26.7	16	1N	C	0916	131	2.3	EK
CATA	22	0915	0915	0955	N12	E55	.813	17076	26.5	40	1F	2 C	0915	167	3.0	
12 ABST	22	0917	0922	0935	N19	W19	.376	17062	21.0	18	-F	C	0922	87	.9	DJ
13 YUNN	22	1043E	1043	1043D	S08	W60	.880	17057	17.9		-N	P		64	1.4	
GRP87014	22	1045+0	1045 1053	1101	S12	W57	.864	17057	18.2	16	-N					
CATA	22	1045	1045	1100	S12	W57	.864	17057	18.2	15	1F	2 C	1045	140	2.9	
KANZ	22	1045	1053	1101	S12	W57	.864	17057	18.2	16	-N	2				
15 KANZ	22	1125	1129	1145	N10	E52	.782	17076	26.4	20	-B	2				

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16 KANZ	22	1149	1149	1153	S22	W19	.565	17091	21.1	4	-F	2				GL
GRP87017	22	1414+3	1418+4	1510	N19	W20	.389	17062	21.1	56	-B					
HOLL	22	1414E	1418	1503D	N18	W21	.395	17062	21.0	49D	1B	2 C		421		
BIGB	22	1417	1422	1517	N20	W20	.397	17062	21.1	60	-B	1 C	1422	100	1.1	
RAMY	22	1417	1422	1503	N19	W20	.389	17062	21.1	46	-B	3 C		176		
GRP87018	22	1644>9	1654 1708+6	1726	N14	E52	.783	17076	26.6	42	-N					
RAMY	22	1644	1654	1726	N14	E52	.783	17076	26.6	42	-N	* C		73		
PALE	22	1656	1714	1714	N14	E52	.783	17076	26.6	18	-F	* C		39		
BIGB	22	1700	1708	1730	N11	E52	.782	17076	26.6	30	-N	* C	1708	120	2.0	
GRP87019	22	1647+9	1656+4	1713	N15	E13	.260	17069	23.7	26	-F					
RAMY	22	1647	1700	1717	N14	E11	.224	17069	23.5	30	-F	3 C		121		
HOLL	22	1656	1656	1708	N16	E15	.297	17069	23.8	12	-F	3 C		39		
GRP87020	22	1712+5	1720+4	1815	N09	W72	.947	17053	17.3	63	1N			140		D
RAMY	22	1712	1720	1817	N09	W68	.922	17053	17.6	65	1N	3 C		124		
BIGB	22	1712	1723	1815D	N13	W70	.934	17053	17.5	63D	-B	2 P	1723	170		
PALE	22	1714	1724	1728	N10	W74	.957	17053	17.2	14	1N	3 C		123		D
HOLL	22	1717	1720	1721D	N09	W76	.967	17053	17.0	4D	1N	3 C		138		
	22	1941	2119	NO FLARE PATROL												
GRP87021	22	2122+2	2129+3	2205	N12	E49	.749	17076	26.6	43	1B					D
PALE	22	2122	2129	2201	N13	E50	.761	17076	26.6	39	2B	3 C		417		D
BIGB	22	2124	2132	2209	N11	E49	.749	17076	26.6	45	1B	3 C	2132	170	2.7	
	22	2123	2219	NO FLARE PATROL												
	22	2238	2309	NO FLARE PATROL												
22 PEKG	22	2346	2347	2352	N12	E48	.738	17076	26.6	6	-N	C	2347	21	.3	D
GRP87023	22	2358+2	0001+2 2418	0040	N19	W26	.470	17062	21.0	42	1B			300	3.4	F
BIGB	23	0000	0001	0040	N19	W27	.483	17062	21.0	40	-B	3 C	0001	120	1.4	
CULG	23	0004E	0004D	0004D	N20	W28	.502	17062	20.9		1N	P	0004	300	3.3	F
PURP	23	0014	0018	0045	N19	W25	.456	17062	21.1	31	1F	C				
PEKG	22	2358	2403	0017	N19	W26	.470	17062	21.0	19	1B	C	2403	336	3.9	F
24 PEKG	23	0003E	0003	0005	S09	W67	.931	17057	18.0	2D	-N	P	0003	25		D
25 PEKG	23	0043	0059	0108	N15	E13	.260	17069	24.0	25	-N	P	0059	63	.7	E
26 PEKG	23	0118	0121	0123	S09	W68	.937	17057	18.0	5	-N	C	0121	8		D
27 PEKG	23	0121E	0121	0131	S07	E24	.465	17075	24.9	10D	-F	C	0121	13	.1	EG
28 PEKG	23	0226	0228	0232	S09	W68	.937	17057	18.0	6	-N	C	0228	21		D
29 TACH	23	0338	0348	0417	N17	W35	.582	17062	20.5	39	-F	C	0348	62	.8	D
30 TACH	23	0441	0445	0450	N09	E43	.677	17076	26.4	9	-B	C	0445	88	1.2	D
31 ABST	23	0546	0549	0555	N20	W31	.541	17062	20.9	9	-F	C	0549	87	1.0	DJ
32 ABST	23	0610	0611	0625	N14	E08	.183	17069	23.9	15	-F	C	0611	131	1.3	EJ
33 ABST	23	0613	0619 IMP.1	0800D NO : CATA	N20	W30	.528	17062	21.0	107D	?N	P	0619	262	3.1	EJK
34 ABST	23	0707	0714	0726	N14	E08	.183	17069	23.9	19	-F	C	0714	131	1.3	EJ
35 ABST	23	0732	0734	0800	N17	W63	.885	17067	18.6	28	-F	P	0734		1.7	DJ
GRP87036	23	0839E	0839 0845	0855D	N20	W32	.554	17062	21.0	16	-B					FK
PEKG	23	0839E	0839	0855D	N20	W32	.554	17062	21.0	16D	-B	P	0839	92	1.1	FK
PEKG	23	0839E	0845	0855D	N20	W32	.554	17062	21.0	16D	-B	P				

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37 PEKG	23	0851	0853	0855	S07	E21	.425	17075	24.9	4	-N		C	0853	84	.9	EG
38 ATHN	23	1052	1054	1111	N21	W36	.609	17062	20.8	19	-B	3	V	1054	89	1.1	
GRP87039	23	1120>9	1200+3	1223	N19	W35	.589	17062	20.8	63	-B						
RAMY	23	1120	1200	1202D	N18	W33	.559	17062	21.0	42D	-B	3	C		196		
ATHN	23	1201	1203	1223	N21	W37	.621	17062	20.7	22	-B	3	V	1203	92	1.2	
40 HOLL	23	1345	1407	1419	N15	W66	.907	17067	18.6	34	-F	3	C		26		
GRP87041	23	1450+0	1450+1	1500	N18	W38	.624	17062	20.8	10	-N						
KANZ	23	1450	1450	1458	N19	W38	.627	17062	20.8	8	-N	2					
RAMY	23	1450	1451	1501	N17	W38	.621	17062	20.8	11	-N	3	C		54		
42 RAMY	23	1722	1725	1729	N16	W39	.632	17062	20.8	7	-F	3	C		23		
43 BIGB	23	1817	1820	1917	N18	W37	.611	17062	21.0	60	-B	2	C	1820	60	.8	
44 HOLL	23	2047	2049	2111	N16	W38	.619	17062	21.0	24	-B	3	C		143		
45 HOLL	23	2119	2122	2126	N13	W71	.940	17067	18.6	7	-F	3	C		26		
46 HOLL	23	2126	2129	2210D	N16	W39	.632	17062	21.0	44D	?B	3	C		246		D
			IMP.1 NO : BIGB														
47 CULG	24	0026E	0027U	0029D	N18	W45	.709	17062	20.6	3D	-N		P	0027	80	1.1	
	24	0120	0122	NO FLARE PATROL													
48 CULG	24	0123E	0123E	0134D	S14	W85	.999	17057	17.7	11D	-F		P	0123	40		
	24	0135	0245	NO FLARE PATROL													
49 CULG	24	0246E	0246E	0321D	N20	W43	.690	17062	20.9	35D	1N		P	0246	160	2.1	
	24	0247	0307	NO FLARE PATROL													
	24	0316	0320	NO FLARE PATROL													
	24	0323	0344	NO FLARE PATROL													
50 TACH	24	0423	0431	0455	N19	W47	.733	17062	20.7	32	1N		C	0431	265	3.9	F
GRP87051	24	0508+4	0531+6 0600	0617	N19	W44	.699	17062	20.9	69	1N				330	4.7	FJ
ABST	24	0508	0531	0630	N20	W44	.702	17062	20.9	82	1N		C	0531	306	4.3	FJ
TACH	24	0512	0537	0559	N19	W45	.711	17062	20.8	47	2N		C	0537	354	5.2	F
ISTA	24	0550E		0630D	N20	W45	.713	17062	20.9	40D	1B						F
PURP	24	0558	0600	0603	N19	W44	.699	17062	20.9	5	1F		C				E
52 ISTA	24	0830E		0915	N20	W45	.713	17062	21.0	45D	?B						F
			IMP.1 NO : CATA YUNN														
53 KHAR	24	0835E		0908D	N16	E46	.718	17124	27.8	33D	-N		P	0835	75	1.1	CE
54 ATHN	24	1005E	1007	1023	N20	W45	.713	17062	21.0	18D	-F	3	V	1007	48	.7	
GRP87055	24	1606+0	1613+1 1703	1728	N17	W50	.764	17062	20.9	82	-B						D
RAMY	24	1606	1613	1718	N17	W52	.785	17062	20.8	72	-B	3	C		150		D
KANZ	24	1606	1614	1702D	N18	W50	.765	17062	20.9	56D	-B	1					
HOLL	24	1615E	1703	1738	N16	W49	.752	17062	21.0	83D	1B	3	C		228		D
GRP87056	24	1820+2	1822+6	1917	N13	W13	.244	17069	23.8	57	-N				110	1.1	
HOLL	24	1820	1822	1929	N13	W12	.229	17069	23.9	69	-N	3	C		152		
BIGB	24	1822	1828	1904	N14	W14	.266	17069	23.7	42	-B	3	C	1828	70	.7	
GRP87057	24	1824	1824 1949+5	2019	N16	W52	.784	17062	20.9	115	1B				270	4.5	D
HOLL	24	1824	1949	2020	N15	W54	.804	17062	20.7	116	1B	3	C		196		
HOLL	24	1824	1824	1825D	N16	W49	.752	17062	21.1	1D	-B	3	C		94		
PALE	24	1942E	1908	1910D	N16	W53	.794	17062	20.8	28D	1N	3	C		383		D
PALE	24	1947	1954	2017	N17	W54	.805	17062	20.8	30	2F	3	C		346		D

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Measurement Corr (Sq Deg)	Remarks
58 PALE	24	2038	2038	2044	N17	W51	.774	17062	21.0	6	-F	3 C		23		
59 PALE	24	2122	2123	2135	N16	W54	.804	17062	20.8	13	-F	3 C		36		
60 PALE	24	2138	2141	2144	N19	W52	.787	17062	21.0	6	-F	3 C		34		
61 PALE	24	2153	2154	2201	S14	E44	.748	17078	28.2	8	-F	3 C		27		
62 PALE	24	2154	2159	2201	N16	W53	.794	17062	20.9	7	-F	3 C		21		
GRP87063	24	2206+1	2210+1	2221D	N17	W56	.824	17062	20.7	15	1B			130	2.4	
PALE	24	2206	2210	2221	N16	W55	.814	17062	20.8	15	-B	3 C		156		
BIGB	24	2207	2211	2309	N19	W57	.835	17062	20.6	62	-B	1 C	2211	100	1.9	
	24	2400	0000	NO FLARE PATROL												
64 PALE	25	0057	0057	0103	N16	W57	.833	17062	20.8	6	-N	3 C		32		
65 PALE	25	0131	0131	0154	N16	W56	.824	17062	20.9	23	-N	3 C		55		
66 YUNN	25	0215E	0215	0217	N20	W60	.861	17062	20.6	2D	-N	P		96	1.9	
67 YUNN	25	0221	0224	0228	N19	W52	.787	17062	21.2	7	-N	C		96	1.6	E
	25	0244	0301	NO FLARE PATROL												
68 YUNN	25	0302E	0302	0302D	N20	W58	.844	17062	20.8		1B	P		225	4.2	
69 YUNN	25	0337E	0338	0338D	N19	W59	.852	17062	20.7	1D	-N	P		80	1.5	
70 TACH	25	0455E	0458	0505	N16	W60	.860	17062	20.7	10D	?B	V	0458	265	5.3	E
			IMP.2	NO : YUNN												
GRP87071	25	0506	0511	0545	N15	W60	.860	17062	20.7	39	?N					J
ABST	25	0506	0511	0545	N17	W60	.860	17062	20.7	39	?N	C	0511	87	1.7	FJ
			IMP.S	IMP.2												
TACH	25	0520E		0523D	N14	W60	.860	17062	20.7	3D	2B	V	0520	309	6.2	E
GRP87072	25	0600+1	0602+1	0610	N06	E16	.274	17076	26.4	10	-F			90	.9	DJ
CATA	25	0600E	0600	0600D	N08	E16	.274	17076	26.4		-F	2 P	0600	84	.9	
ABST	25	0600	0602	0615	N05	E07	.126	17076	25.8	15	-N	C	0602	87	.9	DJ
YUNN	25	0601	0603	0605	N06	E16	.274	17076	26.5	4	1F	C		193	2.1	D
73 ABST	25	0605	0613	0625	N17	W60	.860	17062	20.8	20	-F	C	0613	87	1.7	DJ
GRP87074	25	0633+7	0636+5	0649	N17	W59	.851	17062	20.8	16	1N			200	4.0	J
ABST	25	0633	0636	0655	N17	W60	.860	17062	20.8	22	1N	C	0636	174	3.4	FJ
KANZ	25	0639E		0649	N16	W58	.842	17062	20.9	10D	-F	1				
YUNN	25	0640	0641	0646	N18	W59	.852	17062	20.9	6	1N	C		225	4.4	D
75 ABST	25	0708	0709	0715	S08	W06	.279	17075	24.8	7	-N	C	0709	87	.9	EJ
76 KANZ	25	0741		0800D	N19	W57	.835	17062	21.0	19D	-F	1				
77 KHAR	25	0805E		0815D	S06	W05	.241	17075	25.0	10D	-F	P		80	.9	E
GRP87078	25	0850	0852	0907	N19	W58	.844	17062	21.0	17	1N					J
ABST	25	0850	0852	0907	N17	W60	.860	17062	20.9	17	1N	C	0852	131	2.8	EJ
KHAR	25	0854E		0854D	N21	W57	.836	17062	21.1		-F	P		20	.4	D
GRP87079	25	1015	1020+4	1037	N07	E15	.257	17076	26.6	22	-N					
CATA	25	1015	1020	1025D	N07	E15	.257	17076	26.6	10D	1F	2 P	1020	225	2.4	
KANZ	25	1018E	1020	1020D	N07	E15	.257	17076	26.6	2D	-B	1				
ATHN	25	1022E	1024U	1037	N06	E12	.207	17076	26.3	15D	-B	3 V	1024	64	.7	
80 ATHN	25	1037E	1038U	1038D	N18	W59	.852	17062	21.0	1D	-N	3 V	1038	64	1.2	
GRP87081	25	1229	1303+0 1309	1347	N18	W62	.877	17062	20.9	78	1B			130	2.8	
RAMY	25	1229	1303	1334D	N18	W62	.877	17062	20.9	65D	-B	3 C		118		
KANZ	25	1243E	1303	1334	N18	W62	.877	17062	20.9	51D	-B	2				
ATHN	25	1308E	1309	1400D	N24	W56	.831	17062	21.3	52D	1B	3 V	1309	143	2.5	

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	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type		Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP87082		25	1254+1	1255+4	1303	N07	E13	.223	17076	26.5	9	-N				70	.7	
	RAMY	25	1254	1255	1303	N07	E13	.223	17076	26.5	9	-N	3	C		65		
	KANZ	25	1255	1255	1303	N08	E13	.224	17076	26.5	8	-N	2					
	ATHN	25	1257E	1259U	1300D	N06	E11	.190	17076	26.4	30	-N	3	V	1259	80	.8	
GRP87083		25	1349+4	1353+1	1359	N07	E12	.206	17076	26.5	10	-N						E
	KANZ	25	1349	1353	1357	N08	E12	.207	17076	26.5	8	-B	3					
	LVOV	25	1353	1354	1400	N07	E13	.223	17076	26.6	7	1F		C	1354	200	2.1	E
84	LVOV	25	1407	1413	1430	N17	W62	.877	17062	20.9	23	?N		C	1413	200		DJ
			IMP.1 NO : KANZ HOLL															
GRP87085		25	1453+6	1501+0	1508	N17	W62	.877	17062	21.0	15	1N						
	KANZ	25	1453	1501	1509	N18	W61	.869	17062	21.0	16	1N	2					
	BIGB	25	1459	1501	1507	N17	W64	.892	17062	20.8	8	1N	2	C	1501	100	2.4	
86	KANZ	25	1623	1623	1631	N19	W62	.877	17062	21.0	8	-N	2					
87	RAMY	25	1746	1746	1750	N06	E11	.190	17076	26.6	4	-F	3	C		72		
GRP87088		25	1852>9	2008+0	2023	N16	W65	.899	17062	20.9	91	1B				220		
	HOLL	25	1852	2008	2028	N15	W65	.900	17062	20.9	96	1B	3	C		285		
	BIGB	25	2006	2008	2017	N18	W65	.900	17062	21.0	11	1B	3	C	2008	160		
89	HOLL	25	2058	2101	2111	N15	W68	.920	17062	20.8	13	-F	3	C		55		
GRP87090		25	2111>9	2123	2214D	N18	W67	.914	17062	20.9	63	-N						F
				2155+3														
	CULG	25	2111E	2158U	2250U	N21	W69	.927	17062	20.7	99D	1N		P	2158	180	4.5	F
	HOLL	25	2121	2123	2132	N16	W65	.899	17062	21.0	11	-F	3	C		21		
	HOLL	25	2135	2155	2214	N16	W66	.907	17062	20.9	39	-N	3	C		83		
91	CULG	25	2243U	2252U	2307	S28	E40	.789	17083	28.9	24D	-F		C	2252	120	1.9	
92	CULG	25	2331	2415	0040	N17	E70	.933		31.2	69	2N		C	2415	220		K
93	PEKG	26	0108	0110	0123	N17	W68	.920	17062	20.9	15	?N		C	0110	126		F
			IMP.1 NO : PURP YUNN															
94	CULG	26	0227	0236	0320	N15	W35	.577	17069	23.5	53	-N		C	0236	60	.7	KF
GRP87095		26	0240>9	0245+6	0256	N16	W90	.999	17067	19.4	16	-N						AD
	YUNN	26	0240	0245	0255	N16	W90	.999	17067	19.4	15	1N		C		113		A
	PURP	26	0250	0251	0256	N16	W90	.999	17067	19.4	6	-N		C				D
96	CULG	26	0325	0327	0329D	N16	W21	.381	17069	24.6	4D	-F		P	0327	60	.6	
		26	0330	0335	NO FLARE PATROL													
97	CULG	26	0343	0348	0408D	S28	E38	.774	17083	29.0	25D	?N		P	0348	140	2.1	T
			IMP.1 NO : PURP TACH															
GRP87098		26	0353+2	0356+0	0414	S07	W16	.363	17075	25.0	21	1B						
	CULG	26	0353	0356	0425	S08	W17	.385	17075	24.9	32	1B		C	0356	380	4.0	
	PURP	26	0355	0356	0402	S07	W16	.363	17075	25.0	7	1B		C				
99	CULG	26	0419	0419	0426	N07	E03	.052	17076	26.4	7	-N		C	0419	100	1.0	
GRP87100		26	0538+7	0544+3	0611	N19	W70	.933	17062	21.0	33	1N						IJK
				0554+0														
	ABST	26	0538	0544	0632D	N18	W70	.933	17062	21.0	54D	1N		P	0544	201		FJK
	CULG	26	0540	0545	0706U	N19	W75	.959	17062	20.6	86D	2N		C	0545	190		KFI
	PEKG	26	0545	0547	0552	N19	W70	.933	17062	21.0	7	-N		C	0547	84		E
	YUNN	26	0552	0554	0557	N21	W70	.933	17062	21.0	5	-N		C		80		
	ABST	26	0552	0554	0604	N16	W69	.927	17062	21.1	12	-N		C	0554	87		DJ
101	PURP	26	0622	0626	0653	S27	E36	.752	17083	29.0	31	-N		C				D
102	ABST	26	0727E	0729	0737D	N19	W70	.933	17062	21.1	10D	?F		P	0729	183		DJ
			IMP.1 NO : YUNN PEKG CATA KANZ PURP															

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GRP87103	26	0816+2	0818 0825+3	0840	N17	W72	.944	17062	20.9	24	-N					EK
PURP	26	0816	0828	0838	N19	W72	.944	17062	20.9	22	1B	C				EK
PURP	26	0816	0818	0838	N19	W72	.944	17062	20.9	22	1B	C				
KANZ	26	0818	0826	0850	N16	W72	.944	17062	20.9	32	-B	1				
CATA	26	0825E	0825	0840	N17	W73	.950	17062	20.9	15D	-F	2 P	0825	56		
GRP87104	26	0826>9	0837 0852	0912	S07	W18	.388	17075	25.0	46	-N					EL
KANZ	26	0826	0837	0910	S08	W18	.398	17075	25.0	44	-N	1				L
PURP	26	0850	0852	0913	S07	W19	.400	17075	24.9	23	-N	C				E
105 KANZ	26	0842	0846	0906	N13	W32	.530	17069	24.0	24	-F	1				
106 CATA	26	0855E	0855	0920	N08	W19	.323		24.9	25D	-F	2 P	0855	112	1.3	
107 KANZ	26	0938	0954	1010	N17	W74	.955	17062	20.9	32	-F	1				
GRP87108	26	1022	1026	1050	N08	W18	.307		25.1	28	-F					
KANZ	26	1022	1026	1050	N08	W18	.307		25.1	28	-F	1				
CATA	26	1030E	1030	1035D	N08	W19	.323		25.0	5D	-F	2 P	1030	56	.6	
GRP87109	26	1030+0	1030+0	1057	N17	W74	.955	17062	20.9	27	-N					G
KANZ	26	1030	1030	1057	N17	W74	.955	17062	20.9	27	-B	1				G
CATA	26	1030E	1030	1035D	N17	W75	.960	17062	20.8	5D	1F	2 P	1030	84		
GRP87110	26	1255+4	1317+2	1345	S09	W20	.432	17075	25.0	50	-N					
RAMY	26	1255	1317	1348	S09	W20	.432	17075	25.0	53	-N	3 C		132		
KANZ	26	1259	1319	1342	S09	W20	.432	17075	25.0	43	-N	2				
GRP87111	26	1345+1	1405+6	1422	N20	W73	.949	17062	21.1	37	1N					HJ
LVOV	26	1345	1405	1421	N20	W75	.959	17062	20.9	36	2N	C	1405	400		EHJ
RAMY	26	1345	1408	1422	N20	W71	.938	17062	21.2	37	1B	* C				D
KANZ	26	1346	1411	1423	N20	W73	.949	17062	21.1	37	1N	*				
	26	1712	1759	NO FLARE PATROL												
	26	1818	1837	NO FLARE PATROL												
	26	1851	1925	NO FLARE PATROL												
112 HOLL	26	2008	2018	2026	S25	E29	.678	17083	29.0	18	-F	2 C		53		
	26	2009	2013	NO FLARE PATROL												
113 HOLL	26	2029	2029	2124	S25	E30	.687	17083	29.1	55	-F	2 C		56		
	26	2125	2130	NO FLARE PATROL												
114 CULG	26	2208	2210	2218	N19	W82	.985	17062	20.8	10	1F	C	2210	80		T
GRP87115	26	2256+5	2300+1	2305D	S29	E31	.729	17083	29.3	9	-B					EL
CULG	26	2256	2300	2350	S31	E33	.760	17083	29.4	54	1N	C	2300	200	3.0	L
PURP	26	2301	2301	2305	S28	E30	.713	17083	29.2	4	-B	C				E
116 CULG	26	2332	2400	0037U	S08	W30	.552	17075	24.7	65D	?F	C	2400	240	2.9	H
			IMP.1 NO : BIGB													
117 VORO	27	0044	0045	0046	S05	E90	1.000	17089	2.8	2	?N	C	0045	72		DH
			IMP.1 NO : BIGB PURP													
118 CULG	27	0121	0131	0145	S10	E88	1.000	17089	2.7	24	?F	C	0131	60		
			IMP.1 NO : BIGB													
119 PURP	27	0208	0213	0231	S19	E13	.486	17078	28.1	23	-N	C				E
120 CULG	27	0231	0253	0308	N16	W75	.960	17062	21.5	37	-F	C	0253	60		
121 CULG	27	0423	0425	0439	N09	E23	.388	17081	28.9	16	-N	C	0425	80	.9	
122 ABST	27	0513	0517	0525	N17	W90	.999	17062	20.5	12	?N	C	0517	87		DJ
			IMP.1 NO : CULG YUNN PURP													

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123 CULG	27	0614	0623	0634	N15	W55	.813	17069	23.1	20	-F	C	0623	30	.5	
GRP87124	27	0624	0629 0644+1	0702	S27	E23	.652	17083	29.0	38	-F			140	1.8	EJK
YUNN	27	0624	0629	0635	S27	E22	.645	17083	28.9	11	-F	C		80	1.1	
CATA	27	0630E	0645	0710D	S27	E24	.659	17083	29.1	40D	-F	2 P	0645	112	1.5	
ABST	27	0641	0644	0803	S28	E23	.663	17083	29.0	82	1N	C	0644	174	2.4	EJK
KANZ	27	0641E		0653	S27	E24	.659	17083	29.1	12D	-F	2				
GRP87125	27	0653+2	0655	0703	N17	W86	.995	17062	20.8	10	-F					
KANZ	27	0653		0705	N17	W87	.996	17062	20.8	12	-F	2				
CATA	27	0655	0655	0700	N17	W85	.993	17062	20.9	5	-F	2 C	0655	28		
126 ISTA	27	0703		0712	S05	E90	1.000	17089	3.0	9	-B					A
127 ISTA	27	0717		0722	N19	W90	.999	17062	20.6	5	-B					AD
GRP87128	27	0749+3	0750+8	0830	N14	W47	.727	17069	23.8	41	-N			110	1.6	EGJ
ABST	27	0749	0750	0830	N14	W48	.739	17069	23.7	41	1N	C	0750	174	2.7	EJ
YUNN	27	0750E	0750	0901	N16	W46	.717	17069	23.9	11D	-N	C		80	1.2	G
KANZ	27	0750	0750	0829	N13	W46	.715	17069	23.9	39	-N	3				
PURP	27	0752	0758	0830	N15	W47	.728	17069	23.8	38	1F	C				G
CATA	27	0755E	0755	0840D	N14	W47	.727	17069	23.8	45D	-F	2 P	0755	84	1.3	
129 KANZ	27	0806	0806	0814	S05	E90	1.000	17089	3.1	8	-B	3				
130 CATA	27	0810	0810	0815	N05	E90	1.000	17098	3.1	5	-F	2 C	0810	28		
GRP87131	27	0814+1	0814+1	0819	S28	E26	.684	17083	29.3	5	-F					
KANZ	27	0814	0814	0818	S29	E27	.701	17083	29.4	4	-F	3				
CATA	27	0815	0815	0820	S28	E26	.684	17083	29.3	5	-F	2 C	0815	45	.6	
GRP87132	27	0818	0820+1	0829	N18	W86	.995	17062	20.9	11	-N					A
KANZ	27	0818	0821	0833	N17	W83	.988	17062	21.1	15	-B	3				
YUNN	27	0820E	0820	0825	N20	W90	.999	17062	20.6	5D	-N	C		32		A
133 YUNN	27	0825	0828	0835	S27	E23	.652	17083	29.1	10	-N	C		32	.4	
GRP87134	27	0853+3	0857+3	0916	S26	E23	.642	17083	29.1	23	-F					
KANZ	27	0853	0857	0925	S26	E24	.649	17083	29.2	32	-F	3				
YUNN	27	0856	0900	0907	S27	E22	.645	17083	29.0	11	-N	C		129	1.8	T
135 ABST	27	0924	0925	0931	N17	W90	.999	17062	20.6	7	?N	C	0925	87		D
			IMP.1 NO : YUNN KANZ CATA													
136 ABST	27	0925	0926	0937D	N10	E17	.293	17081	28.7	12D	-F	P	0926	87	.9	D
GRP87137	27	1001+4	1009+6	1024	S16	E10	.424	17078	28.2	23	-F					EG
KANZ	27	1001	1009	1017	S16	E10	.424	17078	28.2	16	-N	3				GE
CATA	27	1005	1015	1030	S17	E10	.439	17078	28.2	25	-F	2 C	1015	84	1.0	
GRP87138	27	1139+2	1140+1	1145	N17	W85	.993	17062	21.1	6	-N					
RAMY	27	1139	1140	1144	N17	W81	.983	17062	21.4	5	-N	3 C				
CATA	27	1140E	1140	1145	N17	W90	.999	17062	20.7	5D	-F	2 P	1140	28		
KANZ	27	1141	1141	1145	N18	W85	.993	17062	21.1	4	-N	3				
139 KANZ	27	1145	1145	1157	N12	E84	.992	17098	2.8	12	-N	3				
140 GEOR	27	1151E		1157	S09	E90	1.000	17089	3.2	6D	-F	1				
141 KANZ	27	1233	1237	1253	N18	W82	.986	17062	21.4	20	-F	3				
GRP87142	27	1325	1332+2	1349	S07	E87	.999	17089	3.1	24	-B					
KANZ	27	1325	1332	1344	S08	E89	1.000	17089	3.2	19	-B	3				
ATHN	27	1332E	1334	1354	S07	E86	.999	17089	3.0	22D	-B	3 V	1334	32		
143 KANZ	27	1340	1400	1412	N12	E84	.992	17098	2.9	32	-N	3				
144 KANZ	27	1630	1634	1638	N12	E80	.981	17098	2.7	8	-B	3				D

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GRP87145	27	1707+4	1726+3	1817	S09	W36	.634	17075	25.0	70	-N				150	1.9	E
HOLL	27	1707	1726U	1827	S09	W37	.646	17075	24.9	80	-N	3	C		165		
RAMY	27	1711	1729	1749	S10	W36	.639	17075	25.0	38	-F	3	C		181		
BIGB	27	1721	1727	1834	S09	W37	.646	17075	24.9	73	-N	3	C	1727	90	1.2	
HUAN	27	1745E		1806D	S10	W36	.639	17075	25.0	21D	-F	1	P				E
GRP87146	27	1758>9	1758 1939	0001D	N14	E78	.973	17098	2.6	363	1F						
HOLL	27	1758	1939	0001D	N14	E78	.973	17098	2.6	363D	1F	3	C				
HOLL	27	1758	1758	1843	N13	E78	.973	17098	2.6	45	-F	3	C				
HUAN	27	1928		1944D	N14	E82	.986	17098	3.0	16D	-F	1	P				
PALE	27	2202E	2225U	2240D	N16	E75	.960	17098	2.5	38D	-F	2	C		43		
147 PURP	27	2355	2404	0025	S07	W28	.519	17075	25.9	30	?F		C				
			IMP.1 NO : CULG														
148 CULG	28	0007	0016	0035U	N09	E78	.975	17098	2.9	28D	1N		C	0016	90		
	28	0100	0103	NO FLARE PATROL													
149 PALE	28	0137E	0200U	0259D	N15	E75	.960	17098	2.7	82D	-F	3	C		62		
150 CULG	28	0224	0229	0237	S29	E10	.607	17083	28.8	13	-N		C	0229	40	.5	T
151 YUNN	28	0312	0314	0316D	N08	E76	.967	17098	2.8	4D	?N		P		80		
			IMP.1 NO : PURP CULG														
152 CULG	28	0339	0342	0355	N08	E78	.975	17098	3.0	16	-F		C	0342	40		
153 YUNN	28	0412	0416	0423	N08	E76	.967	17098	2.9	11	?N		C		209		
			IMP.1 NO : PURP CULG														
GRP87154	28	0445	0447	0510	N09	E74	.957	17098	2.7	25	-N						HJ
YUNN	28	0445	0447	0500	N09	E75	.962	17098	2.8	15	-F		C		48		EHT
ABST	28	0500E	0513	0520	N10	E74	.957	17098	2.8	20D	1N		P	0513	87		DJ
GRP87155	28	0504+2	0510 0517	0540	N11	E03	.085	17081	28.4	36	-N				60	.6	EJ
ABST	28	0504	0510	0540	N11	E04	.097	17081	28.5	36	-N		C	0510	174	1.8	EJ
CULG	28	0506	0517	0556	N11	E02	.076	17081	28.4	50	-N		C	0517	70	.7	
YUNN	28	0518E	0518	0523	N11	E03	.085	17081	28.4	5D	-F		P		64	.7	
156 CULG	28	0529	0534	0540	S08	E71	.953	17089	2.6	11	-F		C	0534	30		
157 CATA	28	0700	0700	0710D	N08	E90	1.000	17098	4.0	10D	?F	2	P	0700	84		
			IMP.1 NO : CULG														
158 ABST	28	0800	0807	0840	N10	E74	.957	17098	2.9	40	1N		C	0807	87		DJ
159 LVOV	28	1148	1150	1218	N12	W86	.996		22.0	30	-F		C	1150	100		DK
GRP87160	28	1156+2	1158+0	1204	S07	E67	.929	17089	2.5	8	-N						D
LVOV	28	1156	1158	1204	S08	E68	.936	17089	2.6	8	1N		C	1158	200		D
RAMY	28	1158	1158	1203	S06	E66	.921	17089	2.4	5	-N	3	C		31		
161 LVOV	28	1157	1202	1206	N09	W71	.941	17069	23.2	9	-F		C	1202	100		D
162 RAMY	28	1245	1247	1249	N13	E71	.939	17098	2.9	4	?F	3	C		124		
			IMP.1 NO : LVOV														
163 LVOV	28	1317	1320	1332	N11	W70	.934	17069	23.3	15	?N		C	1320	200		D
			IMP.1 NO : RAMY														
164 HOLL	28	1331	1613	1620	N02	E73	.956		3.0	169	?F	3	C				
			IMP.1 NO : RAMY														
165 HOLL	28	1418	1420	1432	N11	W01	.070	17081	28.5	14	-F	3	C		38		
166 HOLL	28	1450	1451	1456	S07	E66	.923	17089	2.6	6	-F	*	C		15		
	28	1535	1543	NO FLARE PATROL													

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
167 HOLL	28	1548	1550	1551	S06	E66	.921	17089	2.6	3	-F	*	C		12		
	28	1813	1839	NO FLARE PATROL													
168 PALE	28	2012E	2013	2028D	S25	E03	.534	17083	29.1	16D	-F	3	C		39		
169 CULG	28	2114	2123	2225U	S33	E07	.652	17083	29.4	71D	-N		P	2123	120	1.6	
170 CULG	28	2144	2151	2200	S11	E63	.908	17089	2.6	16	-N		C	2151	70	1.7	
171 CULG	28	2154	2157	2206	S28	W02	.576	17083	28.8	12	-F	*	C	2157	30	.4	
172 CULG	28	2227	2239	2314	S33	E06	.650	17083	29.4	47	-N		C	2239	100	1.3	
173 CULG	28	2259	2304	2324	N12	W15	.268	17123	27.8	25	-N		C	2304	160	1.6	
174 PALE	28	2315E	2315U	2330	N01	E76	.970		3.7	15D	-F	3	C				
175 CULG	28	2358	2403	0134	N15	W75	.960	17069	23.4	96	?F		C	2403	100		K
			IMP.1	NO : HOLL PALE													
GRP87176	29	0019>9	0033+0	0239D	S10	E60	.884	17089	2.5	140	-N				45	.9	E
			0230														
CULG	29	0019	0033	0446	S11	E61	.894	17089	2.6	267	-N		C	0033	60	1.2	T
PEKG	29	0031	0033	0035	S08	E59	.872	17089	2.4	4	-N		C	0033	34	.7	D
PEKG	29	0224	0230	0239	S09	E59	.874	17089	2.5	15	-F		C	0230	37	.8	E
GRP87177	29	0050>9	0100	0135	N13	E63	.884	17098	2.8	45	-F						D
			0116														
PEKG	29	0050U	0100	0114D	N12	E63	.885	17098	2.8	24D	-N		P	0100	50	1.1	D
PALE	29	0113	0116U	0135	N14	E63	.884	17098	2.8	22	-F	3	C		16		
178 PEKG	29	0058	0100	0103	N11	W29	.483	17123	26.9	5	-B		P	0100	55	.6	D
GRP87179	29	0222	0230	0304	N11	W09	.168	17081	28.4	42	-F						K
			0249														
PEKG	29	0222	0249	0304	N11	W09	.168	17081	28.4	42	-F		P				
PEKG	29	0222	0230	0304	N11	W09	.168	17081	28.4	42	-F		P	0230	42	.4	DK
GRP87180	29	0224	0230	0256	N11	E62	.877	17098	2.7	32	-N						EK
			0249														
PEKG	29	0224	0230	0256	N11	E62	.877	17098	2.7	32	-N	*	C	0230	63	1.3	EK
PEKG	29	0224	0249	0256	N11	E63	.885	17098	2.8	32	-N	*	C	0249	67	1.5	D
181 PEKG	29	0224	0230	0230D	S04	E73	.960	17100	3.6	6D	-F		P	0230	21		D
182 PALE	29	0329	0336U	0345D	S03	E63	.896	17089	2.9	16D	-F	3	C		24		
GRP87183	29	0359+5	0405+1	0432	N14	W76	.965	17069	23.5	33	1N						EH
			0415+3														
CULG	29	0359	0406	0500	N15	W76	.965	17069	23.5	61	1N		C	0406	190		H
PEKG	29	0401	0405	0407	N13	W76	.965	17069	23.5	6	-N		C	0405	50		E
TACH	29	0404	0418	0432	N14	W80	.980	17069	23.2	28	1F		C	0406	106		E
PEKG	29	0412	0415	0430	N13	W71	.939	17069	23.8	18	-N		C	0415	42		E
184 PEKG	29	0415	0422	0435	N11	E61	.868	17098	2.8	20	-B		C	0422	67	1.4	E
185 PEKG	29	0551	0559	0606	N11	E65	.900	17098	3.1	15	-N		C	0559	25	.6	D
GRP87186	29	0556+1	0559+4	0610	S07	E71	.952	17100	3.6	14	?N						H
CULG	29	0556	0603	0616	S07	E72	.957	17100	3.6	20	?N		C	0603	240		HFT
			IMP.2	IMP.S													
PEKG	29	0557	0559	0603	S08	E71	.953	17100	3.6	6	-F		C	0559	42		D
GRP87187	29	0609+6	0624+3	0646	S05	E64	.906	17089	3.1	37	1N				130	3.0	EJ
CULG	29	0609	0624	0712	S08	E65	.917	17089	3.1	63	1N		C	0624	180	3.0	F
BUCA	29	0615		0700	S04	E62	.890	17089	2.9	45	-F		P	0625	86	2.0	E
ABST	29	0619E	0626	0645D	S07	E61	.887	17089	2.8	26D	1N		P	0626	180		EJ
ISTA	29	0621E		0634	S05	E65	.913	17089	3.1	13D	-N						E
PEKG	29	0625E	0627	0631	S04	E64	.905	17089	3.1	6D	-F		C	0627	55	1.2	E

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188 ABST	29	0636E	0637	0645D	N10	E60	.860	17098	2.8	9D	?F		P	0637	131	2.6	EJ
			IMP.1 NO : CULG PEKG CATA														
189 YUNN	29	0655	0718	0735	S06	E61	.885	17089	2.9	40	-N		C		64	1.5	
190 PEKG	29	0801	0806	0816	S07	E17	.376	17082	30.6	15	-F		C	0806	8	.1	E
GRP87191	29	0802+3	0805+2 0818	0821	S10	E56	.851	17089	2.5	19	-N				30	.6	J
PEKG	29	0802	0806	0812	S09	E56	.849	17089	2.5	10	-B		C	0806	34	.6	D
CATA	29	0805	0805	0810D	S10	E55	.842	17089	2.5	5D	-F	2	P	0805	28	.5	
ABST	29	0806E	0807	0812	S11	E56	.854	17089	2.5	6D	-N		P	0807	87	1.6	DJ
ABST	29	0810E	0811	0830D	S14	E56	.861	17089	2.5	20D	-F		P	0811	87	1.7	DJ
ABST	29	0810	0818	0830D	S10	E65	.920	17089	3.2	20D	1F		P	0818	175		EJ
192 PEKG	29	0827E	0827	0831	S03	E70	.943	17100	3.6	4D	-N		P	0827	21		E
GRP87193	29	0836+5	0842+2	0852	S05	E70	.945	17100	3.6	16	-N						EJ
PEKG	29	0836	0842	0849	S04	E71	.950	17100	3.7	13	-N	*	C	0842	29		E
ABST	29	0841	0844	0855	S07	E70	.947	17100	3.6	14	1N	*	C	0844	131		EJ
GRP87194	29	0837+4	0842+2	0854	N11	E59	.851	17098	2.8	17	-N						DJ
PEKG	29	0837	0842	0852	N12	E59	.851	17098	2.8	15	-N		C	0842	25	.5	D
ABST	29	0841	0844	0855	N10	E60	.860	17098	2.9	14	-N		C	0844	87	1.7	DJ
GRP87195	29	0924E		0944D	N12	E60	.860	17098	2.9	20	-N						E
KHAR	29	0924E		0944D	N12	E63	.885	17098	3.1	20D	-N		V	0933			E
KHAR	29	0924E		0942D	N12	E57	.832	17098	2.7	18D	-F		V	0942			D
GRP87196	29	1109E	1109 1140	1154D	N12	E61	.868	17098	3.0	45	-N						H
KHAR	29	1109E	1109	1135D	N12	E63	.885	17098	3.2	26D	-N		P	1112	55		H
KHAR	29	1124E	1132	1138D	N12	E57	.832	17098	2.7	14D	-F		P	1130	40	.8	D
KHAR	29	1135E	1140	1154D	N12	E62	.876	17098	3.1	19D	-N		P	1136	50		D
197 KHAR	29	1150E	1153	1202D	S10	E58	.868	17089	2.8	12D	-F		V	1153			D
198 KHAR	29	1157E	1203	1220D	S17	W22	.537	17078	27.8	23D	-F		P	1203	25	.3	D
199 KHAR	29	1210E	1210	1220D	N23	E08	.303	17085	30.1	10D	-F		P	1210	30	.3	D
GRP87200	29	1220E	1220+3 1237	1242	N12	E60	.860	17098	3.0	22	-N						E
ATHN	29	1220E	1223	1240	N12	E61	.868	17098	3.1	20D	-B	3	V	1223	64	1.2	
KHAR	29	1220E	1220	1223D	N12	E57	.832	17098	2.8	3D	-F		P				E
KHAR	29	1230E	1237	1243D	N10	E58	.842	17098	2.9	13D	-F		P	1237	45	.9	E
KHAR	29	1230E	1230	1237D	N13	E62	.876	17098	3.2	7D	-F		P				E
201 KHAR	29	1233E	1237	1243D	S26	W11	.571	17083	28.7	10D	-F		P	1237	20	.3	D
202 KHAR	29	1237E	1240	1243D	S17	W23	.547	17078	27.8	6D	-F		P	1240	25	.3	D
203 KHAR	29	1333E	1337	1337D	S17	W24	.557	17078	27.8	4D	-F		P	1337	25	.3	D
204 HOLL	29	1705	1705	1709	S27	W07	.571	17083	29.2	4	-N	3	C		24		
205 HOLL	29	1708	1711	1721	S08	E53	.819	17089	2.7	13	-N	3	C		40		
GRP87206	29	1759+2	1803 1810	1815	N12	E53	.792	17098	2.7	16	-F						
HOLL	29	1759	1810	1825	N11	E53	.792	17098	2.7	26	-N	3	C		37		
PALE	29	1801	1803	1805	N14	E53	.793	17098	2.7	4	-F	3	C		28		
207 HOLL	29	1914	1926	1932	N23	E03	.278	17085	30.0	18	-F	3	C		48		
208 PALE	29	2006	2008	2012	S07	E53	.816	17089	2.8	6	-F	3	C		37		
209 PALE	29	2022	2025	2030	N13	E58	.841	17098	3.2	8	-F	3	C		20		
210 PALE	29	2126	2132	2142	N14	E51	.772	17098	2.7	16	-F	3	C		28		

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GRP87211	29	2217+6	2223 2350+0	0010D	N13	E53	.793	17098	2.9	113	-N				50	.8	HK
CULG	29	2217E	2240	0010U	N13	E52	.782	17098	2.8	113D	1N		P	2240	150	2.5	FKTH
PALE	29	2223	2223	2236D	N16	E54	.804	17098	3.0	13D	-F	3	C		28		
PALE	29	2349	2350	0006D	N15	E52	.783	17098	2.9	17D	-F	*	C		57		
PEKG	29	2350E	2350	2351D	N13	E53	.793	17098	3.0	1D	-N	*	P	2350	46	.8	D
GRP87212	29	2301+5	2305+3 2313	2324	N23	E02	.275	17085	30.1	23	-N				100	1.0	EK
CULG	29	2301	2305U	2330U	N24	E01	.291	17085	30.0	29D	-N		C	2305	100	1.0	T
PEKG	29	2306	2313	2317	N23	E03	.278	17085	30.2	11	-N		C	2313	114	1.2	E
PEKG	29	2306	2308	2317	N23	E03	.278	17085	30.2	11	-N		C	2308	97	1.0	EK
213 CULG	29	2306	2314	2350	S10	E50	.795	17089	2.7	44	?F		C	2314	180	2.9	KFT
			IMP.1 NO : PALE PEKG														
214 CULG	29	2317	2343U	0013	S05	W70	.945	17075	24.7	56	-F		C	2343	30		
GRP87215	29	2332	2338 2354	0005	N23	E01	.274	17085	30.1	33	-B						EK
PEKG	29	2332	2338	0005	N23	E01	.274	17085	30.1	33	-B		C	2338	84	.9	EK
PEKG	29	2332	2354	0005	N24	E02	.292	17085	30.1	33	-N		C	2354	105	1.1	E
GRP87216	29	2346	0008+1	0017	S07	E63	.902	17100	3.7	31	-F						DK
PEKG	30	0007	0009	0015	S07	E63	.902	17100	3.7	8	-F		C	0009	42	1.0	D
CULG	29	2346	2408	0019	S10	E65	.920	17100	3.9	33	1F		C	2408	100	2.3	K
PEKG	29	2350E	2350	2351D	S07	E63	.902	17100	3.7	1D	-N		P	2350	25		D
217 CULG	29	2347	2348	2358	S08	E06	.280	17082	30.4	11	-F		P	2348	80	.8	
218 CULG	30	0028U	0036	0130U	N24	E01	.290	17085	30.1	62D	-N		C	0036	160	1.6	T
219 CULG	30	0049	0052	0111	N12	E48	.738	17098	2.6	22	-F		C	0052	20	.3	
220 CULG	30	0058	0101	0107	S11	E57	.862	17089	3.3	9	-N		C	0101	40	.7	
221 PEKG	30	0103	0105	0108	N10	W51	.771	17076	26.2	5	-F		C	0105	13	.2	D
GRP87222	30	0114	0120 0200	0200D	N11	E50	.760	17098	2.8	46	-N						EK
PEKG	30	0114	0120	0200D	N12	E51	.771	17098	2.9	46D	-F		P	0120	84	1.3	EK
PEKG	30	0114	0200	0200D	N11	E50	.760	17098	2.8	46D	-N		P	0200	126	2.0	E
GRP87223	30	0116+0	0120+2	0141	S31	W06	.624	17083	29.6	25	-F						
CULG	30	0116	0122	0152	S32	W08	.641	17083	29.5	36	-F		C	0122	150	2.0	F
PEKG	30	0116	0120	0129	S30	W05	.608	17083	29.7	13	-F		C	0120	29	.4	D
GRP87224	30	0155+7	0200+5	0207	N22	00	.256	17085	30.1	12	-N				180	1.9	FKU
PEKG	30	0155	0200	0207	N22	E00	.256	17085	30.1	12	-B		C	0200	177	1.9	FKU
YUNN	30	0202	0205	0206	N22	E00	.256	17085	30.1	4	1F		C		193	2.1	
GRP87225	30	0202+3	0205	0230	N10	E49	.749	17098	2.8	28	-F						
CULG	30	0202	0222E	0222D	N11	E48	.737	17098	2.7	20D	-F		P	0222	40	.6	
YUNN	30	0205	0205	0230	N10	E50	.760	17098	2.8	25	1F		C		290	4.6	
226 PEKG	30	0214	0217	0221	N23	E00	.273	17085	30.1	7	?N		C	0217	210	2.2	FU
			IMP.1 NO : YUNN PALE														
GRP87227	30	0225>9	0230 0242	0312	N22	00	.256	17085	30.1	47	-N						KU
YUNN	30	0225	0230	0309	N22	E00	.256	17085	30.1	44	-F		C		161	1.7	
PEKG	30	0240	0242	0244	N23	E00	.273	17085	30.1	4	1N		C	0242	210	2.2	FU
PEKG	30	0301	0315	0315D	N23	W01	.274	17085	30.1	14D	-N		C	0315	168	1.8	E
PEKG	30	0301	0305	0315D	N23	W01	.274	17085	30.1	14D	-N		C	0305	126	1.4	EK
228 CULG	30	0237E	0239U	0243	N12	E47	.726	17098	2.6	6D	-F		P	0239	20	.3	T
GRP87229	30	0304	0305+1	0323	N11	E49	.749	17098	2.8	19	-F						DK
CULG	30	0304	0306	0330U	N11	E50	.760	17098	2.9	26D	-F		C	0306	100	1.5	TK
PEKG	30	0305E	0305	0315	N12	E48	.738	17098	2.7	10D	-N		P	0305	42	.6	D

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Time (UT)	Measurement Appar (Disk)	Measurement Corr (Sq Deg)	Remarks
230 PEKG	30	0313	0315	0317	S10	E54	.833	17089	3.2	4	-N		C	0315	13	.2	D
231 CULG	30	0352	0356	0406	N12	E47	.726	17098	2.7	14	-F		C	0356	30	.4	T
GRP87232	30	0412>9	0420 0430	0500	S03	E61	.881	17100	3.7	48	-N						D
CULG	30	0412	0420	0500U	S07	E61	.887	17100	3.7	48D	1F		C	0420	190	3.8	TF
PEKG	30	0423	0430	0432	S03	E59	.864	17100	3.6	9	-N		C	0430	42	.8	D
PURP	30	0448	0450	0500	S03	E62	.889	17100	3.8	12	-N		C				D
233 PEKG	30	0422	0430	0440	S10	E48	.775	17089	2.8	18	-B		C	0430	55	.9	E
GRP87234	30	0430E	0430 0450	0450D	N23	W02	.275	17085	30.0	20	?N						KU
PEKG	30	0430E	0450	0450D	N23	W02	.275	17085	30.0	20D	?N		P	0450	273	2.9	FU
IMP.1 NO : CULG TACH PURP																	
PEKG	30	0430E	0430	0450D	N23	W02	.275	17085	30.0	20D	-N		P	0430	105	1.1	EK
GRP87235	30	0430+3	0430+4	0442D	N11	E47	.726	17098	2.7	12	-F						EK
PEKG	30	0430E	0430	0608D	N11	E47	.726	17098	2.7	98D	-N		P	0430	84	1.3	EK
CULG	30	0433	0434	0442	N12	E47	.726	17098	2.7	9	-F		C	0434	20	.3	TK
236 CULG	30	0432	0436	0444	S19	E65	.934		4.1	12	-F		C	0436	90	2.0	
GRP87237	30	0446+2	0450+4	0502	N11	E51	.771	17098	3.0	16	1B						W
PEKG	30	0446	0450	0500	N11	E50	.760	17098	2.9	14	1B	*	C	0450	181	2.9	E
CULG	30	0447	0450	0502	N10	E55	.813	17098	3.3	15	-N	*	C	0450	80	1.3	FT
PURP	30	0448	0454	0603	N11	E51	.771	17098	3.0	75	1B	*	C				W
GRP87238	30	0502>9	0506	0550	N22	W03	.261	17085	30.0	48	-N						EJ
ABST	30	0502E	0506	0550	N23	W04	.281	17085	29.9	48D	-N		P	0506	131	1.4	EJ
YUNN	30	0529	0530	0530D	N22	W02	.258	17085	30.1	1D	1N		P		193	2.1	
YUNN	30	0529	0530	0530D	N22	W02	.258	17085	30.1	1D	1N		P		193	2.1	
GRP87239	30	0521	0522+4	0530	N11	E48	.737	17098	2.8	9	-N						
CULG	30	0521	0522	0528	N12	E46	.714	17098	2.7	7	-F	*	C	0522	10	.2	T
YUNN	30	0525E	0526	0531D	N10	E50	.760	17098	3.0	6D	1N	*	P		321	5.1	
GRP87240	30	0532+0	0538+1 0614>9	0652	N10	E49	.749	17098	2.9	80	1N						FJK
PEKG	30	0430E	0538	0608D	N12	E47	.726	17098	2.7	98D	-N	*	P	0538	126	1.8	F
CULG	30	0532	0539	0550	N12	E48	.738	17098	2.8	18	-N	*	C	0539	110	1.5	T
ABST	30	0532	0538	0616D	N10	E46	.714	17098	2.7	44D	1N	*	P	0538	174	2.6	FJ
CULG	30	0600U	0626	0705U	N10	E50	.760	17098	3.0	65D	1N	*	C	0626	300	4.5	FT
BUCA	30	0600E		0700	N10	E47	.726	17098	2.8	60D	-N	*	P	0610	54	.8	D
PURP	30	0607	0637	0648	N10	E49	.749	17098	2.9	41	1B	*	C				K
PURP	30	0607	0614	0648	N10	E49	.749	17098	2.9	41	1B	*	C				
MANI	30	0616E	0617	0623D	N11	E48	.737	17098	2.9	7D	-N	*	V		20	.3	
PEKG	30	0617	0627	0647	N10	E53	.793	17098	3.2	30	-N	*	C	0627	50	.9	D
CATA	30	0620E	0620	0645	N10	E50	.760	17098	3.0	25D	1F	*	P	0620	140	2.2	
BUCA	30	0625		0650	N10	E52	.782	17098	3.2	25	-N	*	P	0630	86	1.5	
MANI	30	0626E	0626U	0632D	N11	E53	.792	17098	3.2	6D	-N	*	P		50	.8	F
GRP87241	30	0535E	0537+1	0545	S07	E47	.754	17089	2.8	10	-F				20	.3	
PEKG	30	0535E	0538	0545	S09	E47	.761	17089	2.8	10D	-F		P	0538	21	.3	E
MANI	30	0536E	0537U	0540D	S05	E47	.748	17089	2.8	4D	-N	1	V		15	.2	F
242 CULG	30	0621	0623	0626	S07	E60	.879	17100	3.8	5	-N		C	0623	60	1.2	T
243 CULG	30	0635	0640	0650	S12	E47	.772	17089	2.8	15	-N		C	0640	20	.3	T
244 CULG	30	0647	0649	0659	S06	E59	.869	17100	3.7	12	-N		C	0649	70	1.4	T
245 YUNN	30	0656	0711	0728	N23	W02	.275	17085	30.1	32	?N		C		193	2.1	
IMP.1 NO : CULG PURP CATA ABST																	
246 ABST	30	0757	0801	0828	N23	W05	.285	17085	30.0	31	-N		C	0801	131	1.4	DJ

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP87247	30	0801+4	0804+6	0832	N10	E45	.702	17098	2.7	31	1N				170	2.4	EJK
ABST	30	0801	0804	0850	N10	E46	.714	17098	2.8	49	1N		C	0804	218	3.2	EJK
YUNN	30	0802D	0806	0829	N09	E46	.714	17098	2.8	27D	1N		C		209	3.1	
ATHN	30	0805E	0807	0823	N12	E44	.690	17098	2.6	18D	-B	3	V	0807	48	.7	
CATA	30	0805	0810	0835	N11	E45	.702	17098	2.7	30	1F	2	C	0810	140	2.0	
GRP87248	30	0836+2	0839+5	0900	N23	W04	.281	17085	30.1	24	-F				160	1.7	EJ
YUNN	30	0836	0839	0854	N23	W04	.281	17085	30.1	18	-F		C		161	1.7	
ABST	30	0838	0844	0905	N24	W04	.297	17085	30.1	27	-N		C	0844	174	1.9	EJ
249 CATA	30	1055E	1055	1055D	N12	E41	.652	17098	2.5		-F	2	P	1055	28	.4	
GRP87250	30	1242E	1245+5	1322	N11	E43	.677	17098	2.8	40	-B						D
ATHN	30	1242E	1250	1314	N11	E39	.625	17098	2.5	32D	-B	3	V	1250	80	1.1	
RAMY	30	1243E	1245	1330	N11	E43	.677	17098	2.8	47D	1B	3	C		189		D
HUAN	30	1255E		1304D	N11	E44	.689	17098	2.8	9D	-F	1	P	1257	30	.4	
251 RAMY	30	1353	1358	1409	N11	E42	.664	17098	2.7	16	-N	3	C		21		
252 HOLL	30	1456	1458	1505	N23	W08	.303	17085	30.0	9	-F	3	C		24		
253 HOLL	30	1637	1639	1641	N23	W09	.310	17085	30.0	4	-F	3	C		24		
GRP87254	30	1834	1905+4	1933	N11	E39	.625	17098	2.7	59	-F				35	.5	
HUAN	30	1834	1909	1933	N11	E40	.638	17098	2.8	59	-N	1	C	1909	35	.5	
PALE	30	1853E	1905U	1917D	N12	E39	.626	17098	2.7	24D	-F	3	C		33		
GRP87255	30	1907+1	1908+1	1911	S07	E41	.685	17089	2.9	4	-F				25	.3	D
HUAN	30	1907	1909	1910	S08	E42	.701	17089	2.9	3	-F	1	C	1909	25	.4	D
PALE	30	1908	1908	1912	S07	E40	.673	17089	2.8	4	-F	3	C		18		
256 HUAN	30	1910		1938	N22	W10	.304	17085	30.0	28	-F	1	C				E
257 BIGB	30	1923	1924	1957	S26	W24	.650	17083	29.0	34	-N	3	C	1924	60	.7	
258 PALE	30	2026	2026	2032	N22	W12	.323	17085	30.0	6	-F	3	C		31		
259 CULG	30	2114E	2114E	2121	S12	E41	.708	17089	3.0	7D	-F		P	2114	60	.8	
260 CULG	30	2138	2142	2150U	S12	E41	.708	17089	3.0	12D	-F		C	2142	60	.8	
261 CULG	30	2216	2222U	2232	S12	E40	.696	17089	2.9	16	-N		C	2222	80	1.0	
262 PEKG	30	2320E	2325	2336D	N22	W14	.343	17085	29.9	16D	-N		C	2330	21	.2	D
GRP87263	30	2337+1	2339+0	2348	S11	E34	.621	17089	2.5	11	-N				80	1.0	E
PEKG	30	2337	2339	2346	S11	E34	.621	17089	2.5	9	-B		C	2339	67	.9	E
CULG	30	2338	2339	2350U	S12	E34	.627	17089	2.5	12D	-N		C	2339	100	1.3	
264 PALE	30	2349	2350	0006D	N15	E52	.783	17098	3.9	17D	-F	2	C		57		
265 PEKG	31	0002E	0002	0011D	N21	W15	.343	17085	29.9	9D	-B		P	0002	46	.5	D
GRP87266	31	0012+2	0014+7	0040	N09	E37	.597	17098	2.8	28	-N				130	1.6	FU
CULG	31	0012	0018U	0027D	N09	E37	.597	17098	2.8	15D	1B		P	0018	350	4.2	U
PALE	31	0013	0014	0034	N12	E38	.612	17098	2.9	21	-F	3	C		75		
PEKG	31	0014E	0016	0046	N10	E37	.597	17098	2.8	32D	-N		P	0016	105	1.4	F
YUNN	31	0014	0021	0040	N08	E37	.597	17098	2.8	26	1N		C		161	2.1	
267 PEKG	31	0042E	0046	0058	N22	W15	.354	17085	29.9	16D	-B		P	0046	46	.5	D
268 PEKG	31	0110	0115	0131	N09	E36	.583	17098	2.7	21	-N		C	0120	50	.6	D
GRP87269	31	0133+9	0145+4	0222	S09	E37	.646	17089	2.8	49	-N				90	1.2	J
PEKG	31	0133	0149	0222	S09	E37	.646	17089	2.8	49	-B		C	0144	97	1.3	E
VORO	31	0140	0145	0228	S09	E38	.658	17089	2.9	48	-F		C	0145	63	.8	DJ
YUNN	31	0142	0146	0159	S11	E37	.657	17089	2.8	17	-F		C		113	1.5	
270 VORO	31	0150	0152	0207	N18	E90	.999	17093	6.8	17	?F		C	0152	81		D

IMP.1 NO : PALE YUNN PEKG

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
271 PEKG	31	0204	0214	0226	N10	E37	.597	17098	2.9	22	-N		P	0204	42	.5	D
272 PEKG	31	0232	0241	0246	N23	W14	.355	17085	30.1	14	?N		C	0241	214	2.4	F
			IMP.1 NO : VORO														
GRP87273	31	0343E	0343	0351	S10	E35	.627	17089	2.8	8	-N				80	1.0	E
PEKG	31	0343E	0343	0350	S09	E36	.634	17089	2.9	7D	-N		C	0343	71	.9	E
CULG	31	0346E	0346E	0351U	S11	E35	.633	17089	2.8	5D	-F		P	0346	100	1.3	
274 PEKG	31	0440	0455	0500	N22	W17	.376	17085	29.9	20	-N		C	0455	34	.4	E
275 PEKG	31	0502	0504	0513	N27	W58	.851	17084	26.9	11	-F		C	0504	25	.5	D
GRP87276	31	0508>9	0512 0537	0545	N23	W16	.376	17085	30.0	37	-F						EJ
ABST	31	0508	0512	0550	N23	W16	.376	17085	30.0	42	-F		C	0512	131	1.4	EJ
PEKG	31	0535	0537	0540	N23	W16	.376	17085	30.0	5	-N		C	0537	76	.8	E
GRP87277	31	0510+2	0513+0	0518	S06	E44	.717	17100	3.5	8	-B						EJV
PEKG	31	0510	0513	0516	S07	E44	.721	17100	3.5	6	-B		C	0513	37	.6	E
ABST	31	0512	0513	0520D	S05	E45	.726	17100	3.6	8D	1N		P	0513	174	2.4	EJV
278 CULG	31	0530	0532U	0548U	N10	E40	.638	17098	3.2	18D	-F		C	0532	100	1.3	
279 ABST	31	0717	0718	0725	N08	E34	.555	17098	2.9	8	-F		C	0718	87	1.1	DJ
	31	0753	0759	NO FLARE PATROL													
280 KHAR	31	0801E	0805	0811D	S07	E45	.732	17100	3.7	10D	-N		P	0805	75	1.1	E
GRP87281	31	0820>9	0840+3	0938	S06	E45	.729	17100	3.7	78	1N				190	2.7	EJKO
KHAR	31	0820E	0840	0919D	S07	E45	.732	17100	3.7	59D	1N		P	0844	220	3.3	EO
ISTA	31	0830		0904	S06	E46	.740	17100	3.8	34	1B						E
ABST	31	0837	0843	1000D	S08	E45	.736	17100	3.7	83D	1N		P	0843	174	2.6	EJK
KHAR	31	0937	0942	0956	S05	E43	.702	17100	3.6	19	1F		V	0942			E
GRP87282	31	0835+6	0842+0	0847	N10	E32	.526	17098	2.8	12	-N				90	1.1	EJ
CATA	31	0800	0805	0840D	N07	E43	.678	17098	3.6	40D	1F	*	P	0805	197	2.9	
ISTA	31	0835		0847	N13	E32	.530	17098	2.8	12	-N	*					E
ABST	31	0840	0842	0850	N09	E31	.511	17098	2.7	10	-F	*	C	0842	131	1.5	EJ
KHAR	31	0841	0842	0847	N12	E32	.528	17098	2.8	6	-N	*	P	0844	60	.7	DT
GRP87283	31	0923+0	0926+0	0932	N11	E31	.513	17098	2.7	9	-B				90	1.1	HJ
ABST	31	0923	0926	0930	N09	E31	.511	17098	2.7	7	-N		C	0926	131	1.5	EJ
KHAR	31	0923	0926	0932	N12	E32	.528	17098	2.8	9	-B		P	0926			DHT
ATHN	31	0924E	0926	0935	N11	E31	.513	17098	2.7	11D	-B	3	V	0926	64	.8	
GRP87284	31	0959+1	1000+0	1009	N12	E30	.499	17098	2.7	10	-F				40	.5	D
KHAR	31	0959	1000	1007	N12	E30	.499	17098	2.7	8	-N		P	0959	45	.5	DT
CATA	31	1000	1000	1010	N12	E30	.499	17098	2.7	10	-F	2	C	1000	28	.3	
GRP87285	31	1012>9	1028+2	1050	S05	E41	.678	17100	3.5	38	1F				170	2.3	EHO
KHAR	31	1012	1028	1038D	S05	E41	.678	17100	3.5	26D	1N		P	1024	200	2.8	EHO
CATA	31	1025	1030	1050	S05	E41	.654	17100	3.5	25	-F	2	C	1030	140	2.0	
	31	1151	1240	NO FLARE PATROL													
GRP87286	31	1248+2	1249+2	1256	N12	E28	.470	17098	2.6	8	-B				140	1.6	D
ATHN	31	1248	1251	1255D	N12	E29	.485	17098	2.7	7D	-B	3	V	1251	143	1.7	
RAMY	31	1249	1249	1256	N12	E28	.470	17098	2.6	7	-B	3	C		189		
KHAR	31	1250	1250	1255	N12	E28	.470	17098	2.6	5	-B		P	1250	55	.7	DT
287 RAMY	31	1258	1307	1311	S09	E31	.572	17089	2.9	13	-F	3	C		47		
GRP87288	31	1319+9	1330+3 1353	1455	S06	E40	.669	17100	3.6	96	2B						DU
HUAN	31	1319E	1333	1455	S05	E41	.678	17100	3.6	96D	2N	1	P	1333	400	5.4	U
RAMY	31	1325	1353	1443	S05	E41	.678	17100	3.6	78	2B	3	C		803		D
ATHN	31	1328	1330	1400D	S08	E40	.678	17100	3.6	32D	1B	3	V	1330	286	4.0	
BIGB	31	1415E	1417U	1718D	S07	E40	.674	17100	3.6	183D	1N	1	P	1417	290	3.9	

H- ALPHA SOLAR FLARES

AUGUST 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
289 HOLL	31	1515	1519	1524	S04	E38	.637	17100	3.5	9	*-F	3 C		23		
290 HOLL	31	1640	1647	1656	N13	E29	.487	17098	2.9	16	-F	3 C		59		
GRP87291	31	2022+0	2024	2039	N11	E31	.513	17098	3.2	17	-F			60	.7	
HUAN	31	2022		20250	N11	E32	.527	17098	3.2	30	-N	1 P	2025	40	.5	
PALE	31	2022	2024	2039	N12	E31	.514	17098	3.2	17	-F	3 C		79		
292 CULG	31	2157	2200	2204	N12	E25	.424	17098	2.8	7	-F	C	2200	60	.7	
293 CULG	31	2303	2304	2306	S11	E25	.512	17089	2.8	3	-N	C	2304	130	1.6	V
GRP87294	31	2345+4	2350 2402	0007	S11	E39	.680	17100	3.9	22	-N					D
PEKG	31	2345	2350	2359	S12	E39	.685	17100	3.9	14	-F	P	2350	21	.2	D
PEKG	31	2349	2402	0014	S10	E39	.675	17100	3.9	25	-B	* C	2402	63	.9	D
	31	2400	0000	NO FLARE PATROL												
	31	2400	0000	NO FLARE PATROL												

"Remarks":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of CaII.
P = Flare shows helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

The 4-digit number appearing under "Remarks" denotes the calcium plage region number assigned by the Space Environment Services Center in Boulder, Colorado.

DAILY FLARE INDICES
(Includes all Flares)

August 1980

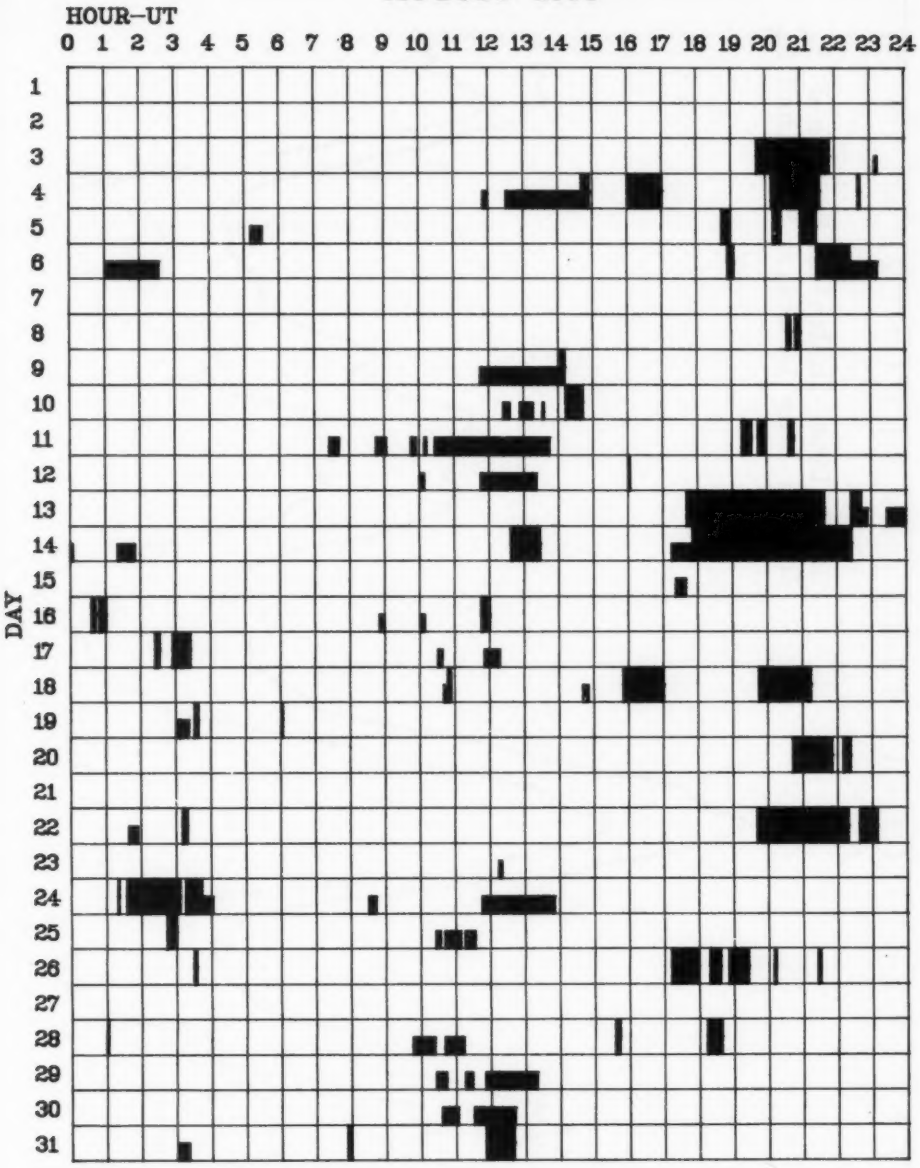
Day	Flare Index*	Hours Observed	Day	Flare Index*	Hours Observed	Day	Flare Index*	Hours Observed
01	25.33	24.0	11	882.76	23.4	21	192.27	24.0
02	25.33	24.0	12	71.00	24.0	22	183.56	20.8
03	47.32	21.9	13	563.02	19.7	23	61.86	24.0
04	24.82	21.3	14	66.58	18.6	24	149.99	22.0
05	16.47	23.1	15	72.46	24.0	25	203.46	23.7
06	36.66	22.8	16	75.80	23.4	26	110.01	22.1
07	38.26	24.0	17	74.35	23.3	27	72.09	24.0
08	32.52	23.7	18	99.10	21.2	28	42.79	23.4
09	61.87	23.8	19	138.86	23.9	29	95.38	24.0
10	82.70	23.5	20	153.17	22.6	30	170.97	24.0
						31	406.07	23.1

*When no flare index is given, it is zero for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

AUGUST 1980

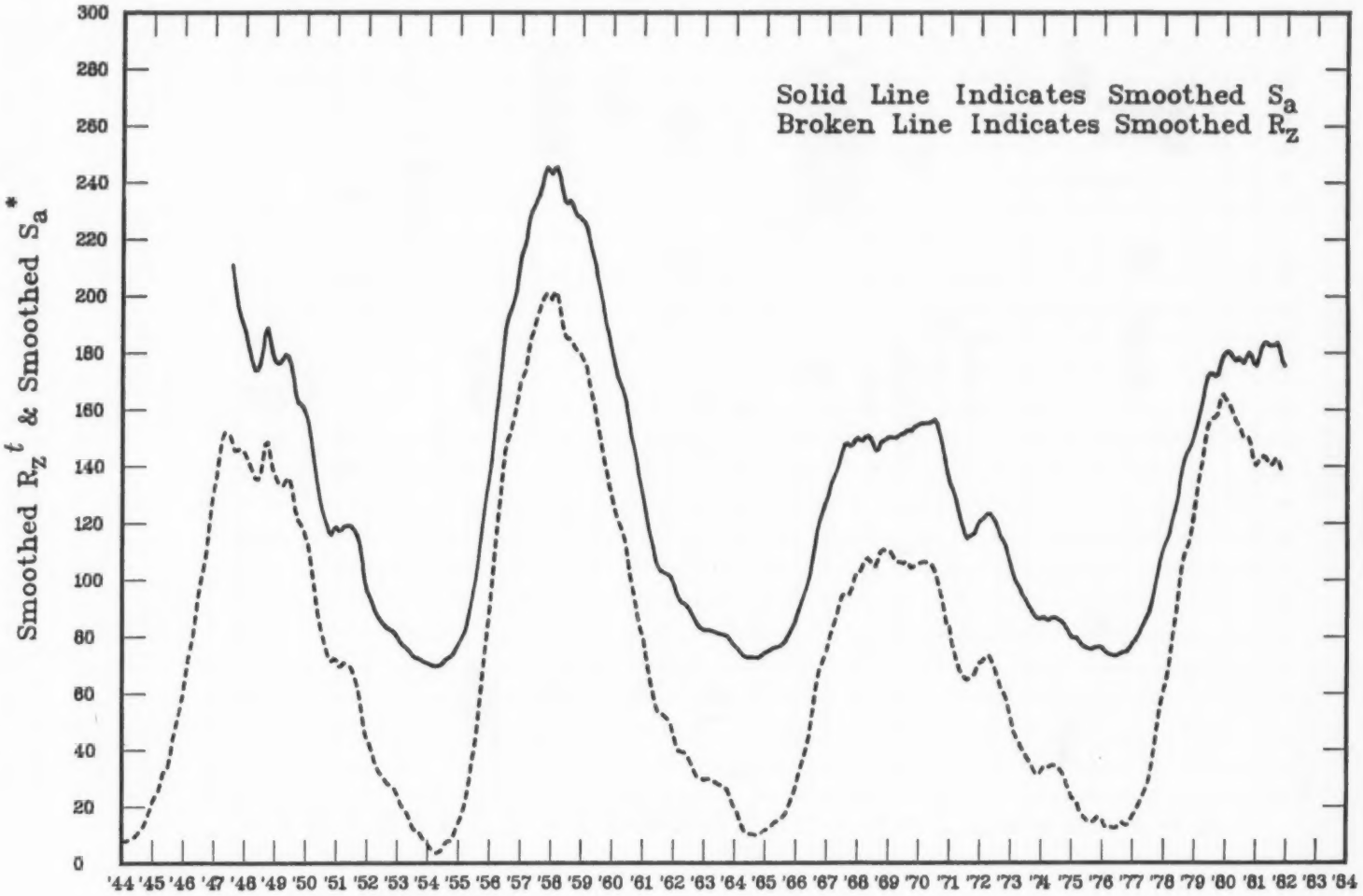


Observatories included in total patrol:

Abastumani	Culgoora	Istanbul	Palehua	Voroshilov
Athens	Georgiana	Kanzelhoehe	Peking	Wendelstein
Big Bear	Haute Provence	Kharkov	Purple Mt.	Yunnan
Bucharest	Holloman	Lvov	Ramey	
Catania	Huancayo	Manila	Tashkent	

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

Superposition of Zürich Sunspot Numbers and Ottawa 10.7 cm Flux
January 1944 – December 1981



* Solar Flux Units (10^{-22} W/m^2 Hz) Adjusted to 1 A.U., Series D.

t Reduced Zürich Sunspot Numbers.

SGD 462 Part II (Comprehensive)

MISCELLANEOUS DATA

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* Solar Flux Units (10^{-22} W/m² Hz) Adjusted to 1 A.U., Series D.
† Reduced Zürich Sunspot Numbers.

ACTIVE REGIONS

CARRINGTON ROTATION 1721

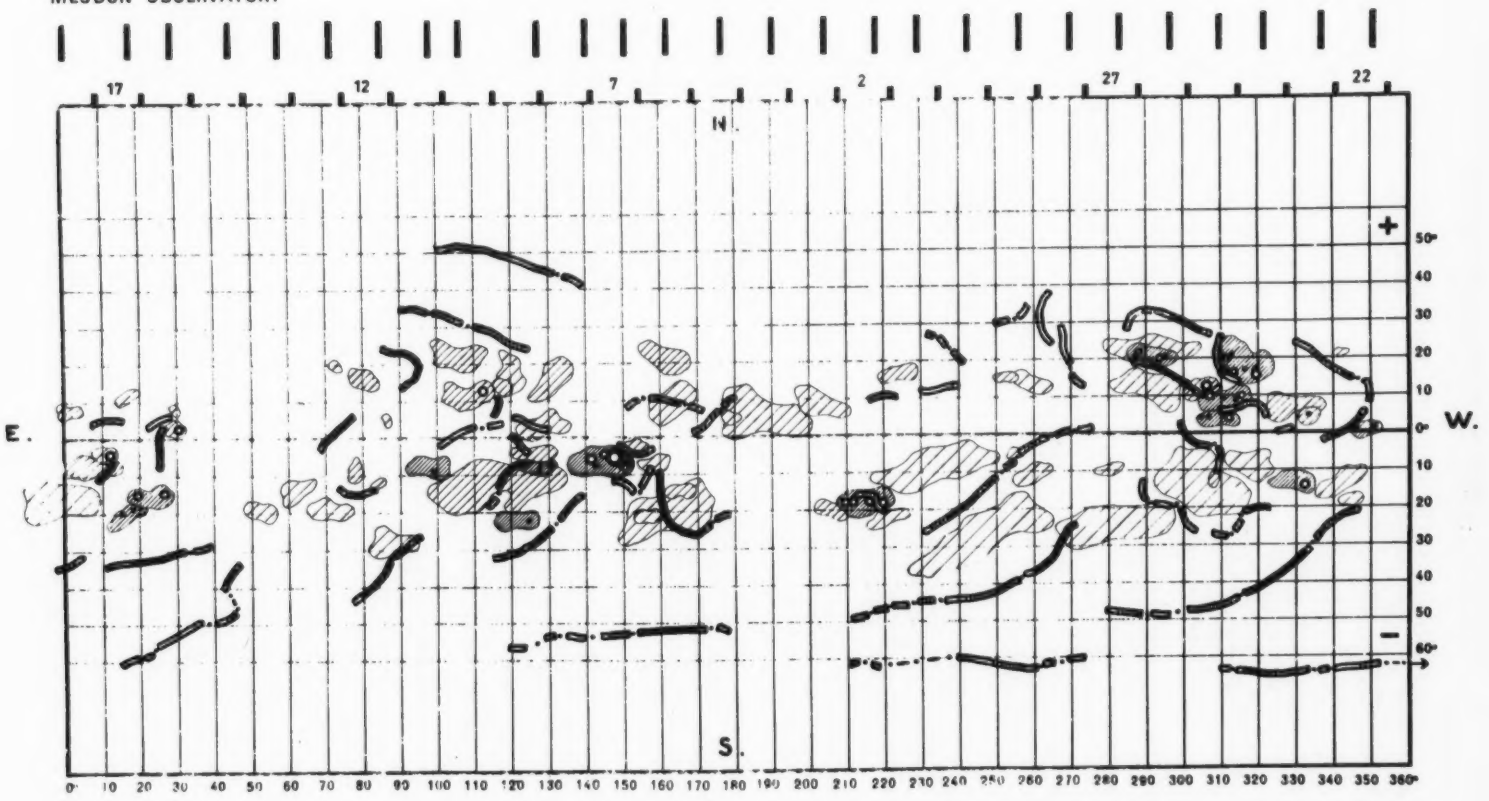
(April 4 to May 18, 1982)

Region No.	Coordinates Lat.	Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1720	Activity at West Limb
1	1°N	349	2	-1			decreasing
2	18°S	345	1	>6	x		dispersed
3	13°S	343	1	>6	x		decreasing
4	21°N	343	1	+4	x		disappeared
5	5°N	334	2	+1			decreasing
6	7°N	330	1	>6	x		dispersed
7	13°S	330	3	>6			decreasing
8	19°N	316	5	>6		8	decreasing
9	9°N	311	4	+4			decreasing
10	4°N	310	3	>6			decreasing
11	12°S	309	1	-6	x		(?)
12	12°N	305	3	>6		9	decreasing
13	21°N	293	3	+4			decreasing
14	23°N	293	1	>6	x		dispersed
15	13°N	292	1	>6	x		dispersed
16	9°S	280	1	0	x		dispersed
17	10°S	260	1	-2	x		dispersed
18	16°N	253	1	+5	x		decreasing
19	17°N	224	1	>6	x		disappeared
20	22°S	221	1	>6	x		decreasing
21	17°S	215	4	+5			decreasing
22	19°S	206	1	>6	x	29-30	dispersed
23	10°N	203	1	>6	x		decreasing
24	6°N	188	1	>6	x	35-36-37	dispersed
25	6°N	179	1	+3	x		dispersed
26	14°S	165	1	>6	x		dispersed
27	10°N	163	1	>6	x		dispersed
28	20°S	162	1	>6	x		decreasing
29	22°N	161	1	>6	x		decreasing
30	6°S	157	1	>6	x		disappeared
31	21°S	157	1	+2	x		dispersed
32	2°S	153	1	>6	x		dispersed
33	6°S	144	5	>6			decreasing
34	16°N	131	1	>6	x	46	decreasing
35	4°N	128	1	>6	x		dispersed
36	8°S	128	2	-3			stable
37	4°S	126	1	>6	x		dispersed
38	22°S	122	2	>6			dispersed
39	18°N	120	1	>6	x	46	disappeared
40	15°N	117	1	+2	x		dispersed
41	11°S	115	2	>6	x	48	decreasing
42	13°N	109	3	>6			decreasing
43	23°N	106	1	>6	x		dispersed
44	7°S	97	2	+6			decreasing
45	28°S	88	1	>6	x		dispersed
46	6°N	87	1	+2	x		disappeared
47	12°S	84	1	>6	x		dispersed
48	17°N	80	1	>6	x		dispersed
49	9°S	78	1	>6	x		decreasing
50	20°N	73	1	+4	x		disappeared
51	14°S	62	1	>6	x		dispersed
52	19°S	52	1	>6	x		dispersed
53	4°N	29	3	>6		61	decreasing
54	9°N	29	1	+5	x		disappeared
55	15°S	23	4	+2			decreasing
56	19°S	16	2	+6			decreasing
57	3°S	10	3	>6		62	decreasing
58	6°S	8	1	>6	x		decreasing
59	8°N	1	1	+5	x		disappeared

SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1721
APRIL 21 - MAY 18, 1982

MEUDON OBSERVATORY



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Misc
Apr-May 82

SOME OTHER SOURCES OF DATA

Data Available: Some data available in publication form are cited here. A list is given, along with addresses of the responsible institutions. The WDC-A for Solar-Terrestrial Physics publishes the Toyokawa, Ottawa and Penticton radio data in its monthly publication, *Solar-Geophysical Data*. The WDC-A for Solar-Terrestrial Physics also receives most of the periodicals when they become available.

Belgium: *Bulletin d'Observations: Activite Solaire - Observations Radioelectriques Solaires - 600 MHz (Humain, Belgium)* Observatoire Royal de Belgique, Ave. Circulaire 3, Brussels, Belgium (monthly since 1962)

Canada: *Solar Noise Observations at 2800 Mc/s (Ottawa - ARO) and 2700 Mc/s (Penticton - DRAO)* Series C Monthly Report, National Research Council, Radio Astronomy Section Ottawa 7, Ontario, Canada (since 1947)

France: *Carte Synoptiques de la Chromosphere Solaire* Observatoire de Paris, 92 Meudon, France (monthly since 1931)

Germany: *Daily Mean Value of Solar Flux Density* Heinrich-Hertz Institut, 1199 Berlin-Adlershof, Rudower Chaussee 5, G.D.R. (monthly since Jul 1957)

Italy: *Solar Phenomena - Monthly Bulletin and Photographic Supplement* Osservatorio Astronomica di Roma, Monte Mario, Rome, Italy (monthly since 1958); *Osservazion Solari, Solar Flux and Distinctive Events* Osservatorio Astronomico Di Trieste (quarterly since 1965); *Solar Observations made at Catania Astrophysical Observatory* (annually since 1967)

Japan: *Monthly Report of Solar Radio Emission* Radio Astronomy Section, Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan (since 1956); *Solar Activity Chart* WDC-C2, Toyokawa Observatory, Nagoya University, Toyokawa, Japan (annually since 1968); *IAU Quarterly Bulletin on Solar Activity* Tokyo Astronomical Observatory, Mitaka, Tokyo, Japan (since 1978)

Netherlands: *Geomagnetic Data* IAGA Bulletin No. 12 (1932-69), No. 32 (since 1970) IUGG Publications Office, 39 ter, Rue Gay-Lussac, Paris V, France (annually)

Philippines: Manila Observatory "Solar Maps and Activity", Manila Observatory, P.O. Box 1231, Manila, Philippines (monthly)

Switzerland: Bulletin of "Berne Solar Observations", Institute of Applied Physics, Div. of Solar Observations, Sidlerstrasse 5, 3012 Berne, Switzerland (since 1968)

Taiwan: *Report on Sunspot Observations* Taiwan Provincial Weather Bureau Observatory, Taipei, Taiwan (quarterly since 1957)

USSR: СОЛНЕЧНЫЕ ДАННЫЕ *(Solar Data)* USSR Academy of Science (monthly since 1958); КОСМИЧЕСКИЕ ДАННЫЕ *(Cosmic Data)* (monthly since 1962); *Magnetic Fields of Sunspots* (bimonthly since 1964)

USA: *Preliminary Report and Forecast of Solar-Geophysical Activity* Space Environment Services Center, NOAA, Boulder, Colorado 80303 USA (weekly); *Solar-Geophysical Data* NOAA, Boulder, Colorado 80303 USA (monthly since November 1955)

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